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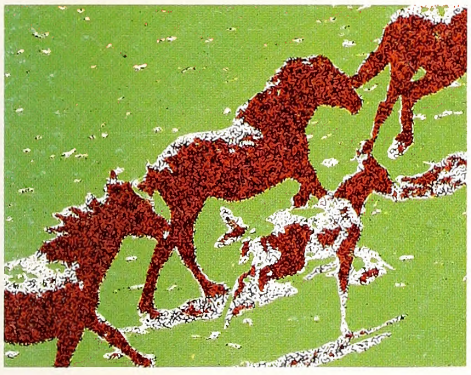
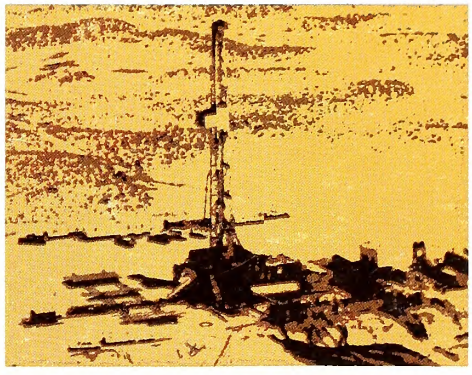
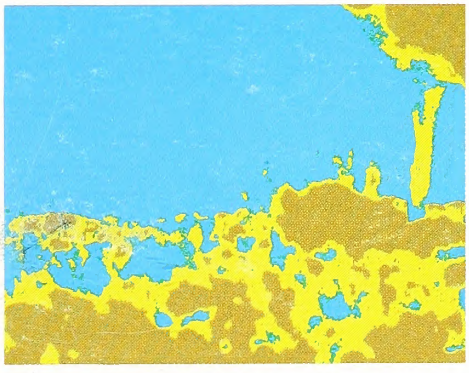
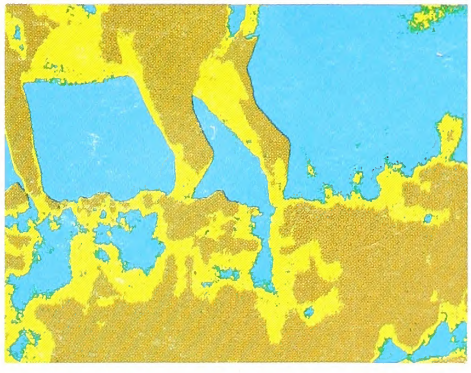
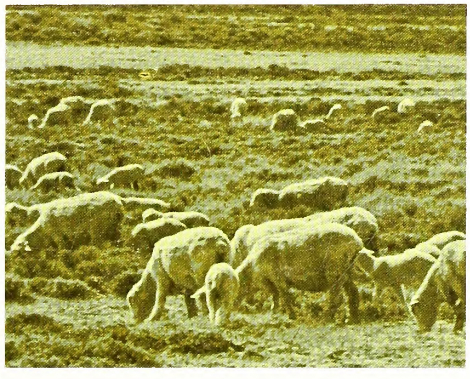
# .and Use Decisions

## Western Powder River Basin Area







U. S. DEPARTMENT OF THE INTERIOR • BUREAU OF LAND MANAGEMENT

LANDS

MINERALS

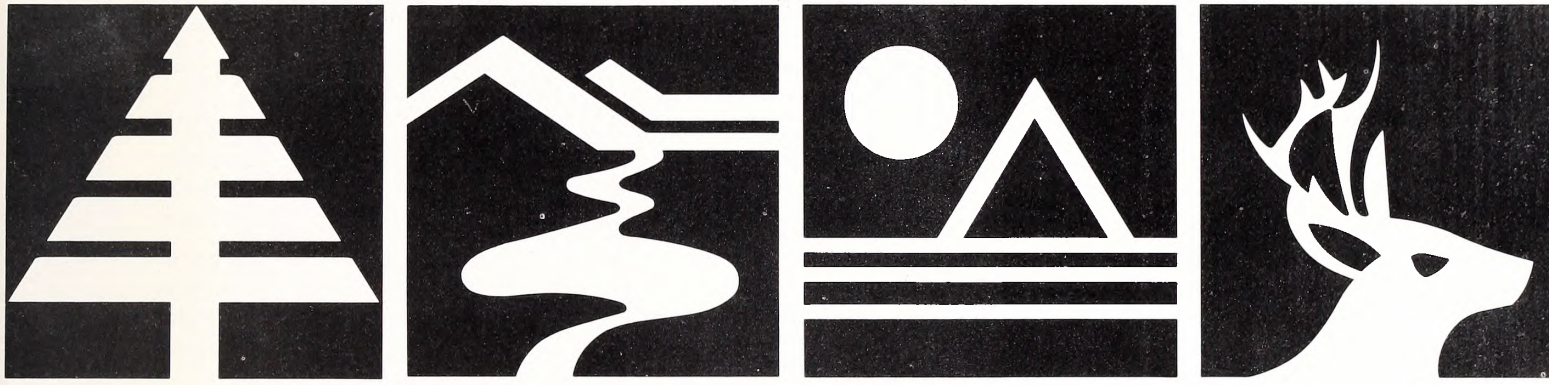
RANGE
MANAGEMENT

FOREST PRODUCTS

WATERSHED

RECREATION

WILDLIFE



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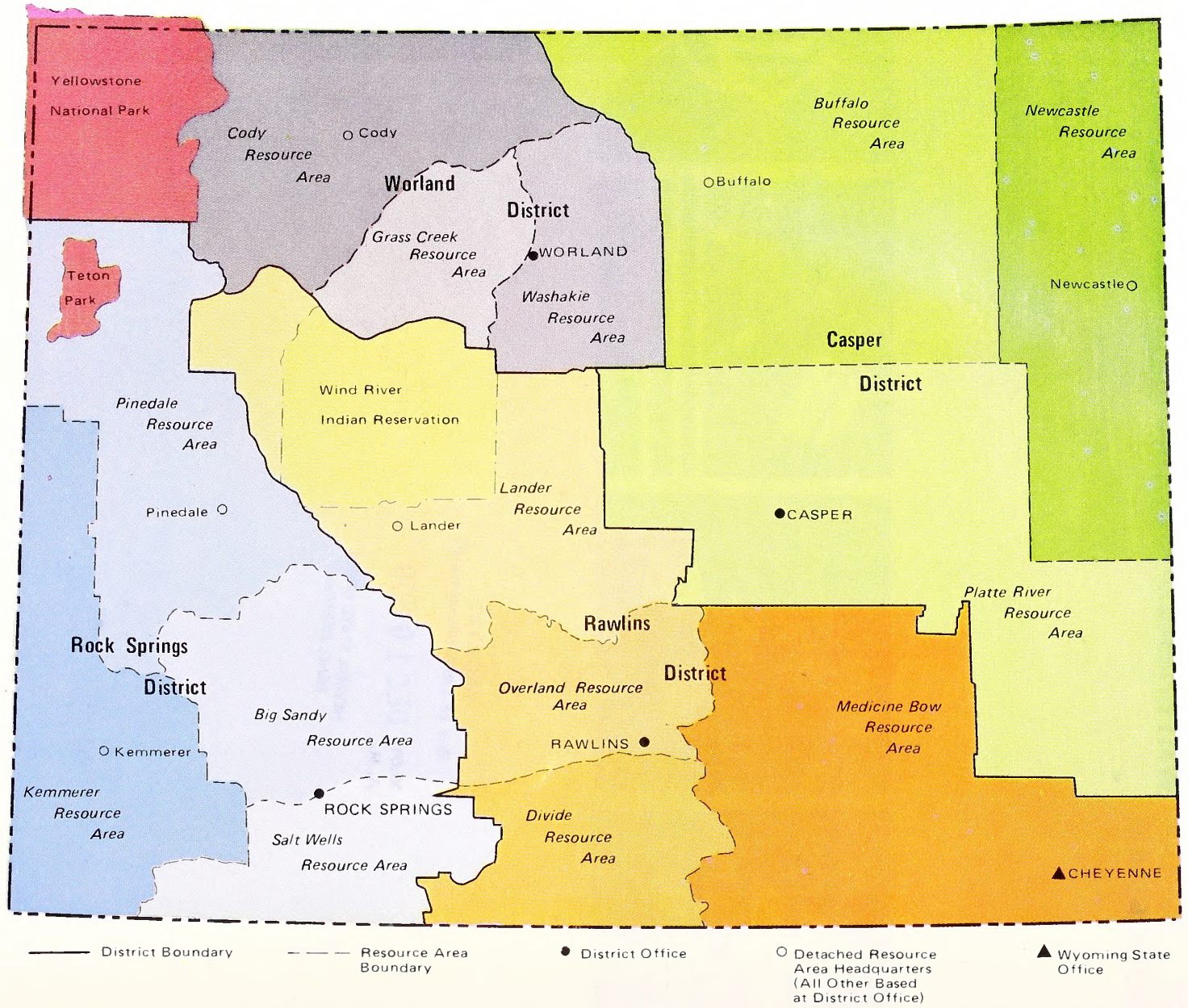

# PURPOSE

This brochure summarizes the Management Framework Plan (MFP) decisions for public lands and federal mineral estate in the Western Powder River Basin planning area, an area that includes Sheridan and Johnson counties.

Many of the decisions are updated versions of decisions finalized in a 1975 planning effort covering all of northeast Wyoming. The update was necessary to reflect new laws, changes in resource management policy and public needs, and new resource data. As these kinds of factors continue to change in the future, this plan will be updated as required.

Many organizations and individual citizens contributed information and ideas to this plan. My staff and I thank you all. If you have questions or if you would like to review specific portions of the MFP at our Buffalo or Casper offices, please let us know.

**Robert E. Wilber**
**District Manager**
**Casper District**
**November, 1979**

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# PURPOSE AND DESCRIPTION OF PLAN

The updated Management Framework Plan will serve as a guide for management of the public lands as well as the federal mineral estate, much of which lies under privately owned surface.

The plan includes narrative and graphic displays of proposed land use decisions, supported by the rationale and a summary of public input for each resource program: lands and realty, energy and minerals, range, forestry, watershed, recreation and wildlife.

The MFP is a working document. It is a guide for day-to-day activity. The planning decisions allocate resources and land uses, thereby defining and resolving use conflicts. Program objectives and land use allocations set forth in the MFP provide guidelines for developing specific activity plans for management of each resource program. This plan does not address coal development and wilderness review.

At the time planning decisions were being formed, the Department of the Interior was reviewing its coal leasing policy. As a result, the district did not have sufficient guidance to address the coal development potential of the planning unit. Coal will be included in future planning under the Interior Department's new federal coal management program.

The BLM Wilderness Review Program is in the inventory phase which is being conducted under procedures developed especially for wilderness review. The inventory phase will end on or before September 30, 1980 with issuance of a final decision by the Wyoming State Director on establishment of Wilderness Study Areas. However, since it is a national program, it is beyond the scope of this plan. Wilderness Study Area determinations will be included in future planning.

Additional information on coal development and wilderness review can be obtained from BLM's Buffalo and Casper offices.

# THE PLANNING AREA

The Western Powder River Basin includes Sheridan and Johnson counties. Sheridan, Buffalo and Kaycee are the principal cities.

The planning area contains about 4.3 million acres of land surface, 562,781 acres (13%) of which are public lands administered by BLM. (See Map 1.) In addition, BLM administers 2,350,595 acres of federal mineral estate in the two counties, much of which is beneath privately owned surface land.

The surface in the planning area is predominately private (61%). The U.S. Forest Service administers 17% of the surface, BLM 13% and the Wyoming State Government 9%.

The main geographic features are the Bighorn Mountains on the western border, the Powder River in the south and the Powder River Breaks and the Middle Fork and North Fork Canyon of the Powder River along the eastern border.

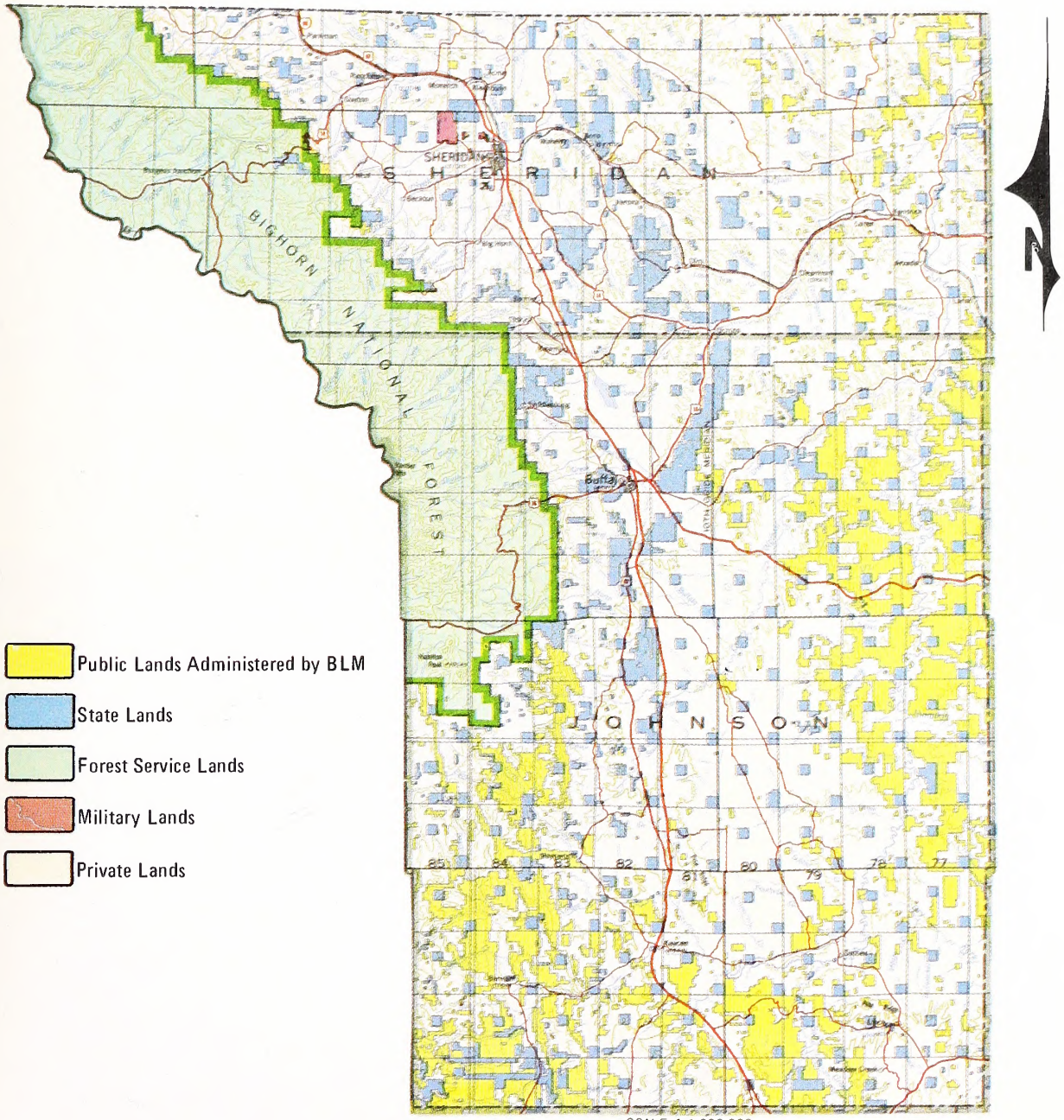
**Resource Values.** BLM administers a wide range of valuable public resources in the planning area. Large deposits of energy minerals such as oil and gas, coal and uranium have the potential to help meet the area's and the nation's energy needs. Many of eastern Wyoming's ranchers graze their cattle or sheep on BLM administered public lands. The southern Bighorn Mountains, a prime recreation area, contain significant timber stands which contribute to the area's need for timber products. Wildlife ranges throughout the area with important habitat located in the southern Bighorns and Fortification Creek.

## PUBLIC LAND AND FEDERAL MINERALS IN THE PLANNING AREA ADMINISTERED BY BLM

| | PUBLIC LAND (% of total county) | FEDERAL MINERAL ESTATE |
|---|---|---|
| Sheridan County | 50,730 acres ( 3%) | 541,520 acres |
| Johnson County | 512,051 acres (19%) | 1,809,075 acres |
| **TOTAL PLANNING AREA** | **562,781 acres (13%)** | **2,350,595 acres** |

**This panoramic view shows the Bighorn Mountains from the access road to the Billy Creek Environmental Education Area.**

# Map 1
# Western Powder River Basin Planning Area


SHERIDAN
S H E R I D A N
BIGHORN NATIONAL FOREST
J O H N S O N
Buffalo
Public Lands Administered by BLM
State Lands
Forest Service Lands
Military Lands
Private Lands
SCALE 1:1 000 000
1 inch equals approximately 16 miles
10 0 10 20 30 40 Miles
10 0 10 20 30 40 50 Kilometres
Contour interval 500 feet

# MANAGEMENT DECISIONS

## Introduction

The Western Powder River Basin MFP contains over 50 management decisions. Space limitations prohibit a detailed discussion of each decision in this brochure. The most significant decisions, in terms of resource value and public controversy, are discussed in detail. Other decisions are summarized at the end of the "Management Decisions" section.

## Most Significant Management Decisions

## LANDS

### Program Description

The realty (lands) program supports other BLM resource management activities, as well as those of local, state and other federal agencies. It includes actions such as: planning, classification, appraisal, exchanges, sales, record maintenance and administration of leases, rights-of-way and land use permits.

Lands with unusual values can be designated for specific purposes. Examples are withdrawal of lands for recreation development, preservation of unique natural features, cultural or historic values.

BLM also provides land for community expansion and other public purposes. This includes private development where such ownership best serves the public interest.

### Resource Description

The planning unit contains about 1,620,000 acres in Sheridan County and 2,670,000 acres in Johnson County.

In Sheridan County, 3 percent of the surface is administered by BLM, 8.6 percent by the state, 25 percent by other federal agencies and 63.4 percent of the surface is privately owned. Of the 2,670,000 acres in Johnson County, about 19 percent are public lands (see Map 1), 9 percent are state lands, 12 percent are in the Bighorn National Forest and 60 percent are privately owned.

The major concentration of public lands is along the Powder River in the eastern part of both counties and the southern Bighorn Mountains in the southwestern part of Johnson County. Most public lands are widely dispersed.

The highest demand for realty actions on the public lands is for rights-of-way for pipelines, powerlines and roads associated with energy mineral development.

There are few demands for disposal of public lands. Requests have been made by Sheridan, Buffalo and Kaycee for public lands to be transferred for recreation and public purposes. Developments would include a recreation complex for Sheridan, an addition to the Buffalo City Park and a new water system for Kaycee.

### Multiple Use Objective

Manage and develop public lands to maintain a quality environment, to help meet the public's need for lands and resources and to contribute to the economic stability and orderly growth of industries, communities and regions.

### Multiple Use Decisions

**1. Buffalo Clear Creek Green Belt. (See Map 2.)**

**Negotiate with the Wyoming State Land Board to exchange public lands for 320 acres of state land along Clear Creek adjacent to the city of Buffalo. If the exchange is accomplished, issue the city of Buffalo a recreation and public purposes permit to manage it as a green belt.**

**Public lands available for exchange include (See Map 3):**

- **—280 acres in the Red Hills Area,**
- **—49 acres in the French Creek Area,**
- **—830 acres in the area of the proposed Middle Fork Reservoir (however this could only be exchanged after an environmental statement on the reservoir proposal has been completed),**
- **—Other public lands as identified by Wyoming State Land Board will be considered.**

**Rationale:** To prevent potential pollution problems in the Clear Creek Area, the City of Buffalo wants to secure the state land along Clear Creek to assure the maintenance of water quality in the area. However, state law requires the land be sold at fair market value, a price the city cannot afford. BLM has authority under the Recreation and Public Purposes Act to lease or sell public lands to local government for less than fair market value. Therefore, BLM decided to participate in negotiations for the three-way exchange.

**2. Fort MacKenzie Withdrawal Review/Sheridan County Recreation Complex. (See Map 4.)**

**Proceed with Sheridan County's recreation and public purposes application for 560 acres of land within the Fort MacKenzie Withdrawal Area.**

**Rationale:** The Sheridan Board of County Commissioners has advised BLM that there is more demand for the county fairground facilities than they can handle. Many organizations are seeking land for new recreation uses in the area. The 560 acres under consideration are presently used for short-term military maneuvers and are also leased for cattle grazing.

The area would provide an excellent recreation site because it is 3.5 miles from the edge of the city of Sheridan and is physically suited for outdoor recreation activities. The Wyoming National Guard has agreed to relinquish this portion of the withdrawal with the condition that it be made available to Sheridan County for a recreation complex.

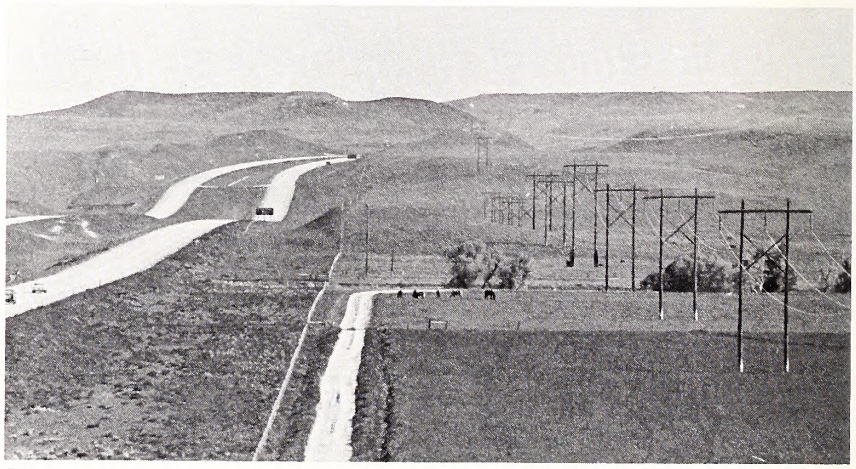
**3. Transmission and Transportation corridors. (See Map 5.)**

**New transmission or transportation facilities which cross boundaries of the planning area should be located within defined corridors. This policy will apply to facilities that meet any of the following criteria:**

- **—Power Lines: Any line with an "H" type structure carrying 115 Kv or larger.**
- **—Pipe Lines: Any lines 6 inches in diameter or larger regardless of volume.**
- **—Highways: Major collector highways.**
- **—Railroads: All main railroad lines leading out of the planning area.**

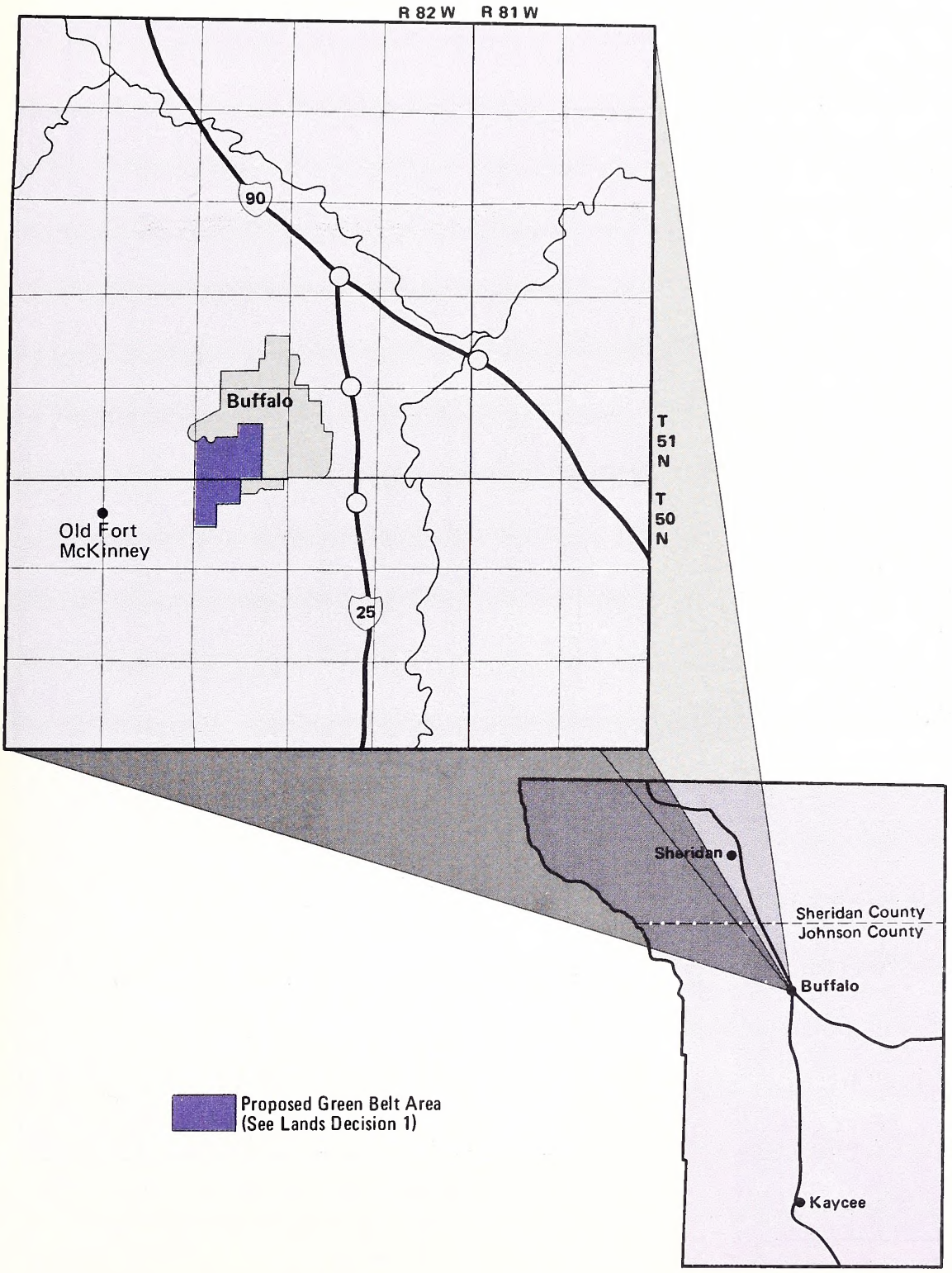
**In effect, this decision establishes corridors around existing facilities. New corridors will be considered only when location within defined corridors is shown to be impractical and unfeasible and where the environmental impact can be mitigated.**

**Rationale:** Major transmission and transportation facilities have already been constructed within the planning area. By establishing corridors around the existing facilities and locating new facilities within these corridors, problems concerning adverse environmental impacts, landowner concerns, design survey and right-of-way problems can be mitigated. This decision is an extension of a corridor study completed in 1977 for the Eastern Powder River Basin Planning Area. The study was the combined effort of 34 individuals from 24 agencies or firms.

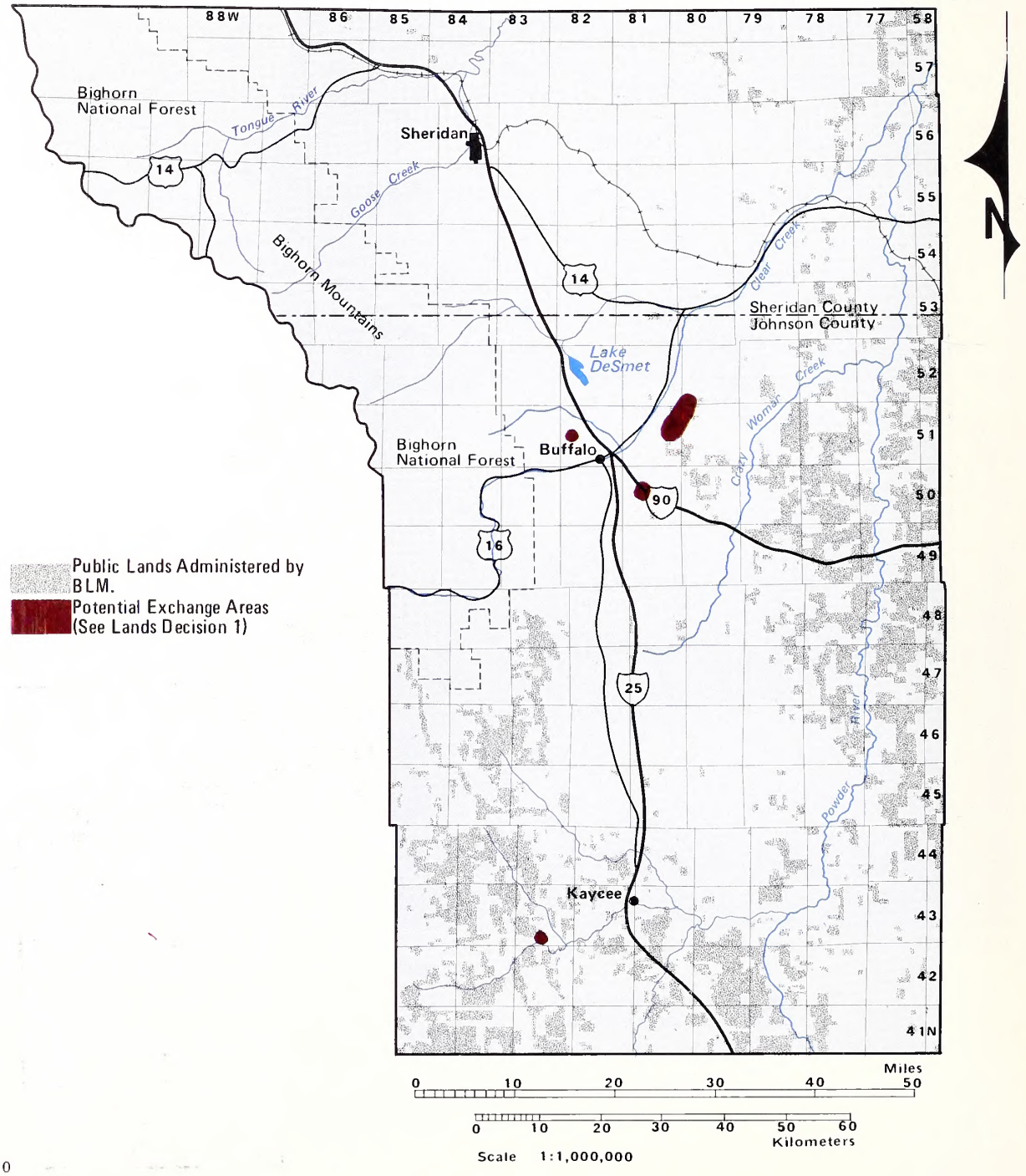


**BLM will establish energy transmission and transportation corridors around existing facilities.**

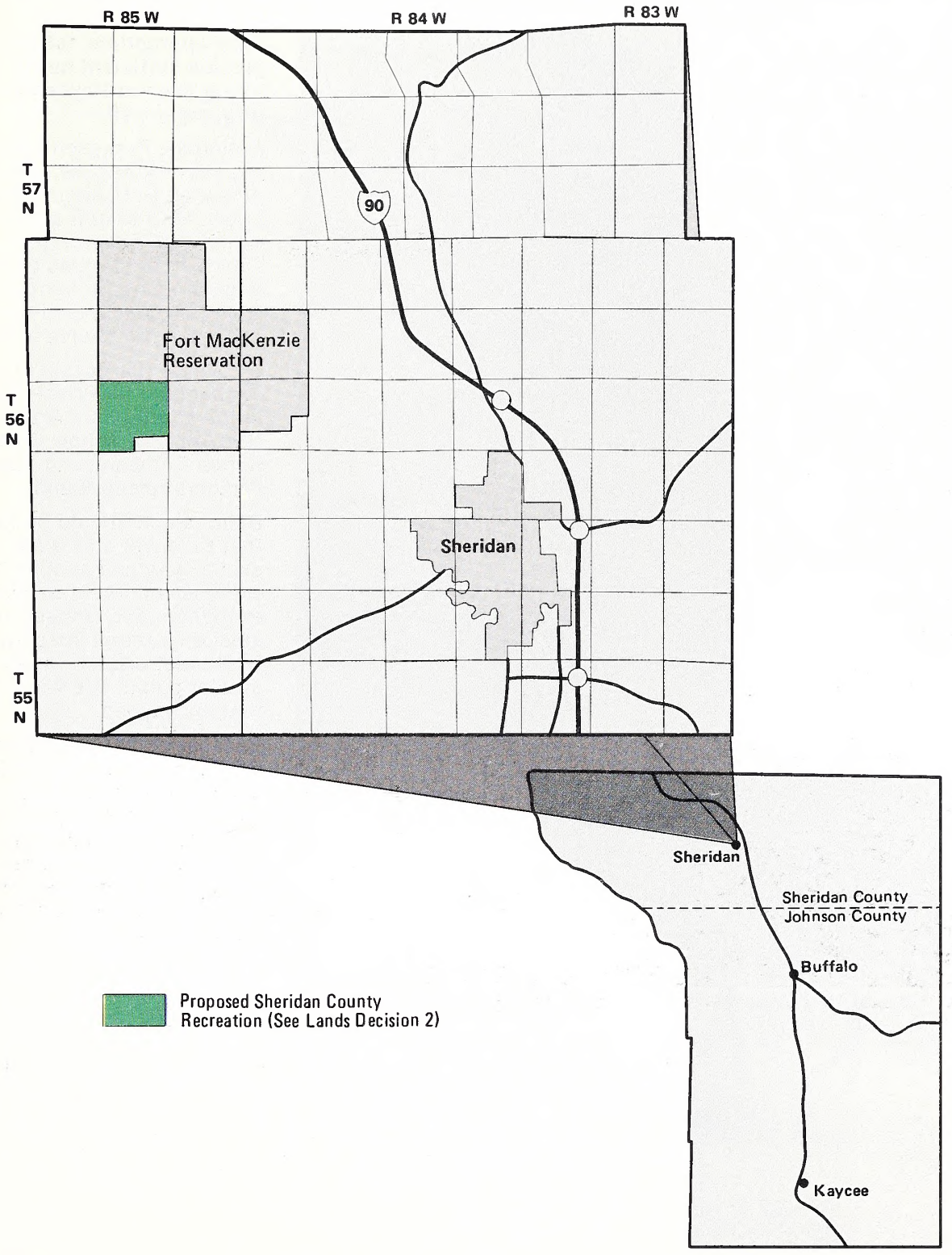
## Map 2
## Clear Creek Area

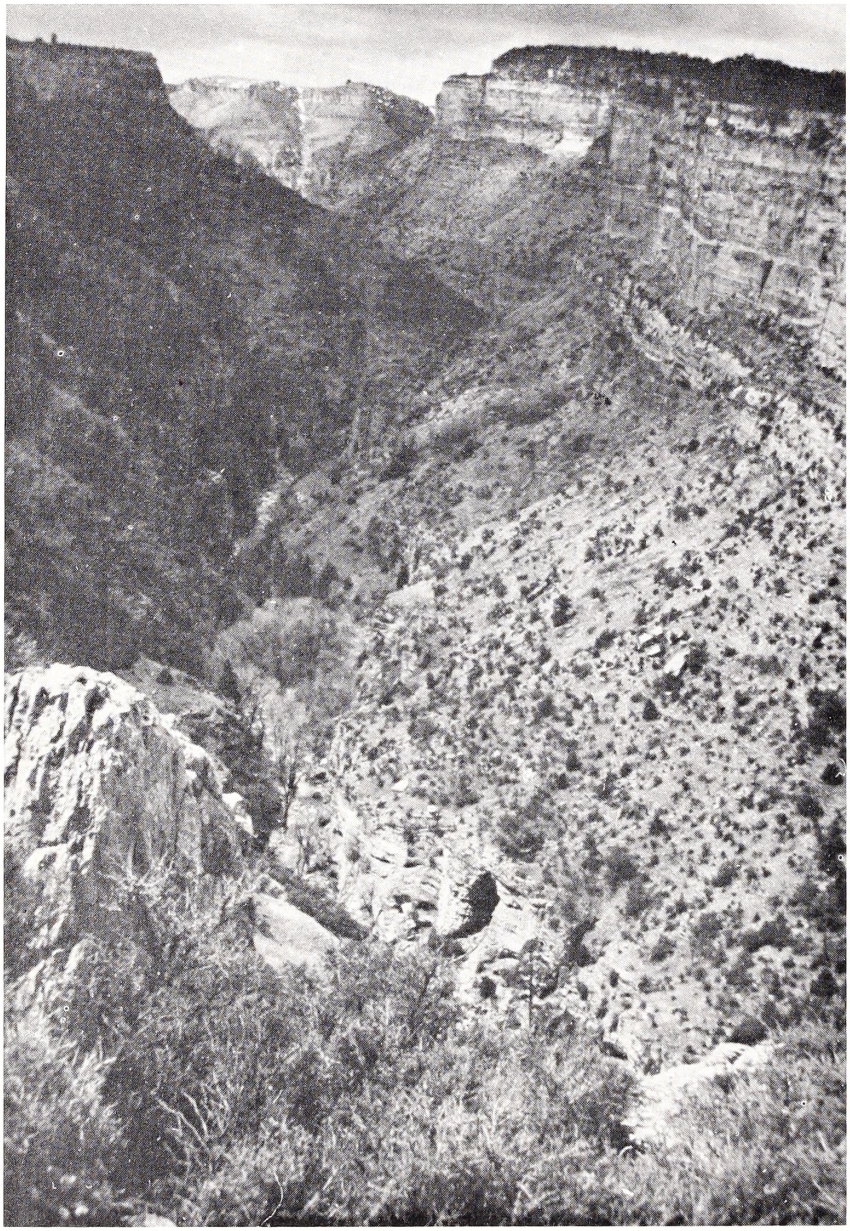


# Map 3
## Areas BLM is Willing to Exchange for Clear Creek Land



# Map 4
## Fort MacKenzie Withdrawal Area





**BLM will explore the possibilities for land exchanges in the Middle Fork area.**

**4. New Kaycee Water Well. (See Map 6.)**

**Take appropriate action to provide sufficient public land to the town of Kaycee for a new water well.**

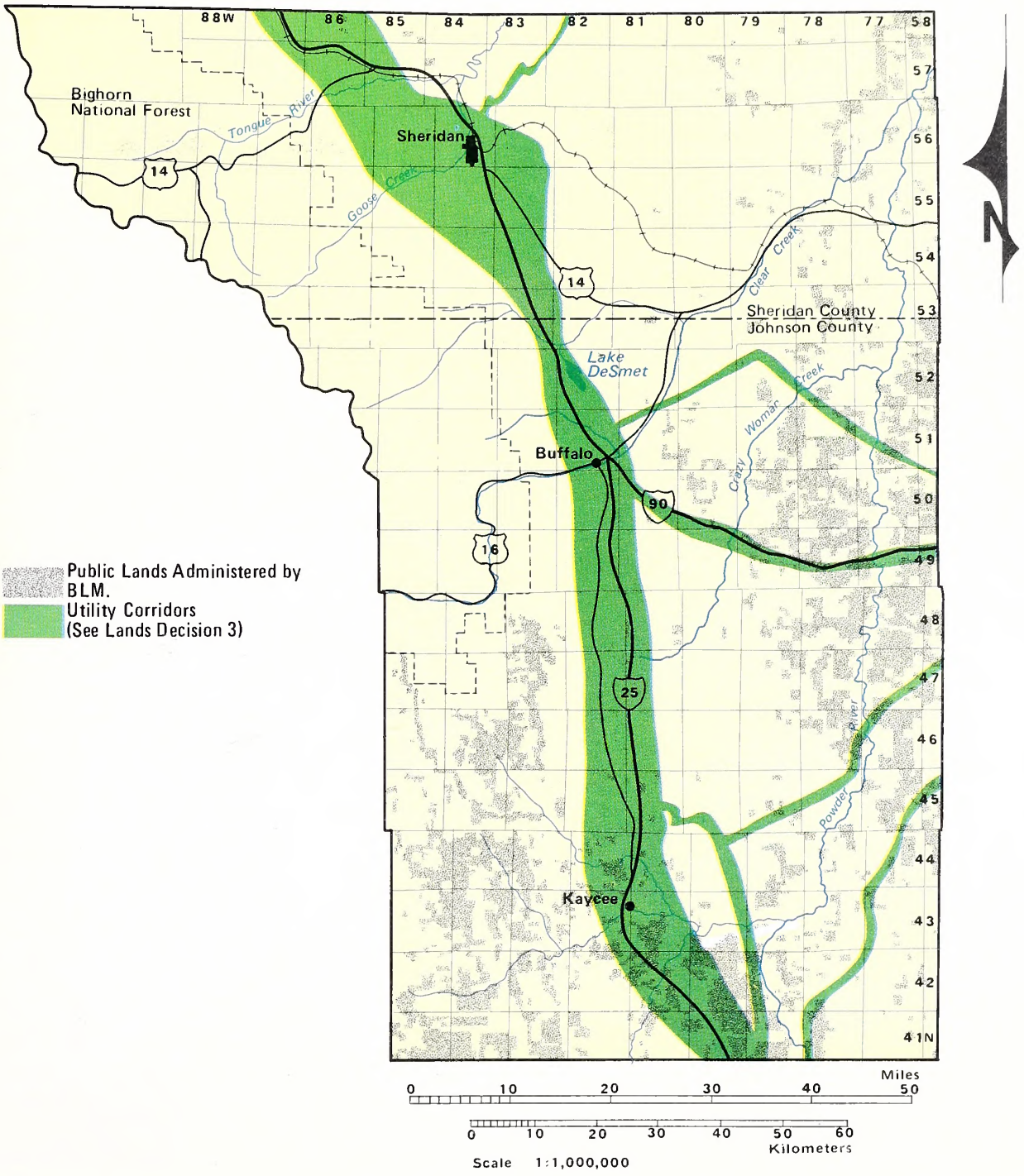
**Rationale:** Representatives of the town of Kaycee have approached BLM about obtaining public land to drill a new town water well. Their current water supply from streams contains large amounts of bentonite which has decreased the quality of the town's water.

**5. Explore the Possibilities of Exchanging for Private Lands in the Middle Fork Area (see Map 14) with Willow Creek Ranch Company and Ellis Brothers Sheep Ranch.**

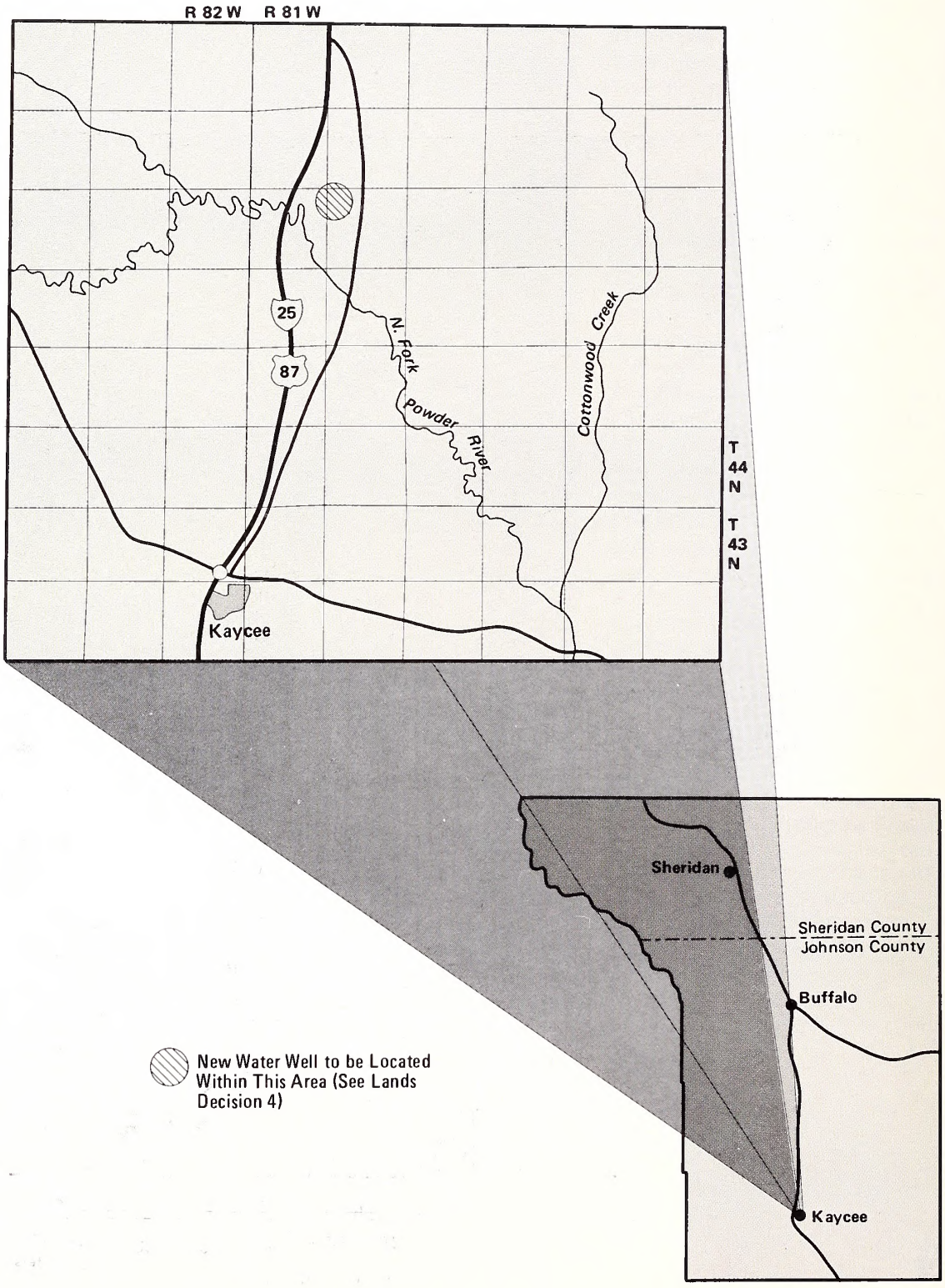
**Rationale:** It should be noted that BLM will only enter into an exchange when another party expresses interest in such an exchange. Exchanges will be guided by the philosophy that BLM must acquire land of greater public use value than that exchanged.

Because the above mentioned exchanges will help meet the objectives of the Middle Fork Management Plan (see Recreation Decision #1) and because they have been proposed by the private landowners, they meet the Bureau's guidelines for exchange.

# Map 5
## Energy Transmission and Transportation Corridors



# Map 6
## Kaycee Water Well Site



## MINERALS

### Program Description

In the historic disposal of land to private individuals and newly formed states, title to the surface and subsurface rights were often separated. In conveying title, the Federal Government reserved rights to the underground minerals beneath millions of acres of land which passed into private ownership. The distinction has important implications for the management of mineral resource in the planning area.

**The minerals fall into three categories:**

*Locatable:* Locatable minerals are minerals that may be claimed under the General Mining Law of 1872. Upon proof of mineral discovery and other legal requirements claimants can obtain title to both the minerals and surface estate. Locatable minerals are mainly metals such as gold, silver, lead, copper, zinc and uranium; however, a few nonmetallic minerals such as fluorspar, asbestos and mica are also in this category and some deposits of bentonite containing unique characteristics are locatable. Uranium is the most significant locatable mineral in the planning area.

*Leasable:* These are minerals that may be leased under the Mineral Leasing Act of 1920. Title to the mineral estate, and the surface if it is public land, is retained by the United States. Coal, oil and gas, oil shale, phosphates, trona (sodium) and potassium are examples of leasable minerals, the most significant of which are coal and oil and gas in the planning area.

*Salable:* These are minerals that may be sold under the Materials Sale Act of 1947. Title to the mineral estate, and the surface if it is public land, is retained by the United States. They include common varieties of sand, gravel, stone, clinker (scoria) and bentonite. These materials are in demand for energy related construction activities.

The minerals program includes adjudicating mineral patent applications; appraisal and disposing of minerals by lease, license and permit; coordinating exploration and mining activities with other land uses; and providing protection and reclamation of mined land.

Mining plans, environmental analyses, and surface protection and rehabilitation measures are required in connection with the lease or sale of minerals. There are presently no such requirements attached to the development of locatable minerals under the 1872 Mining Law.

### Resource Description

Mineral resources in the planning unit are the major source of public and private income. This revenue comes from the direct sale of minerals, from wages and salaries paid to employees and from taxes and royalties paid by industry to state, local and federal governments.

During 1976, 2 percent of the coal, 3 percent of the oil and 7 percent of the bentonite in Wyoming were produced from Johnson and Sheridan counties.

During 1976, oil accounted for 98% of Johnson County's assessed mineral valuation and coal accounted for 84% of Sheridan County's assessed mineral valuation. However, as oil and gas reserves are depleted and it becomes more difficult (and expensive) to discover new reserves, coal and possibly uranium production will become the dominant industries in the planning area.

Uranium could become an important industry within the next five years. There are plans for processing plants near Kaycee. Johnson County contains substantial reserves of uranium and exploration and development is continuing at a rapid rate.

Development of energy minerals will increase demand for sand, gravel, scoria and crushed stone to fulfill support needs such as roads, housing and other structures.

### Multiple Use Objectives

Manage mineral resources for efficient development, giving priority consideration to energy minerals but, at the same time, providing environmental protection and mitigation of socio-economic impacts.

*(Note: BLM is not addressing proposed decisions pertaining to coal development at this time. See section on Purpose and General Description of Plan.)*

## Multiple Use Decisions

### 1. Surface Protection Plans for Oil and Gas Fields. (See Map 7.)

**On areas where there are existing oil and gas fields, BLM will develop plans for surface rehabilitation.**

**Where major new oil fields are anticipated, BLM will, in coordination with the private surface owner, oil company, and the U.S. Geological Survey, prepare a plan to minimize impacts on other land uses and the environment.**

**Rationale:** Numerous oil and gas fields have been developed with inadequate planning for protection of surface resources. Adverse surface, visual and other environmental impacts have resulted. Although planning cannot eliminate these impacts it will help to mitigate them.

### 2. Reserved Mineral Material Areas. (See Map 8.)

**Coordinate with the Johnson and Sheridan County Road and Bridge Departments, the Wyoming State Highway Department and local city governments to determine the location of mineral material areas (sand, gravel and scoria) needed for future construction of county and state roads. Once locations have been identified, have the county and state determine the amount of material they will need and reserve this amount for their future use.**

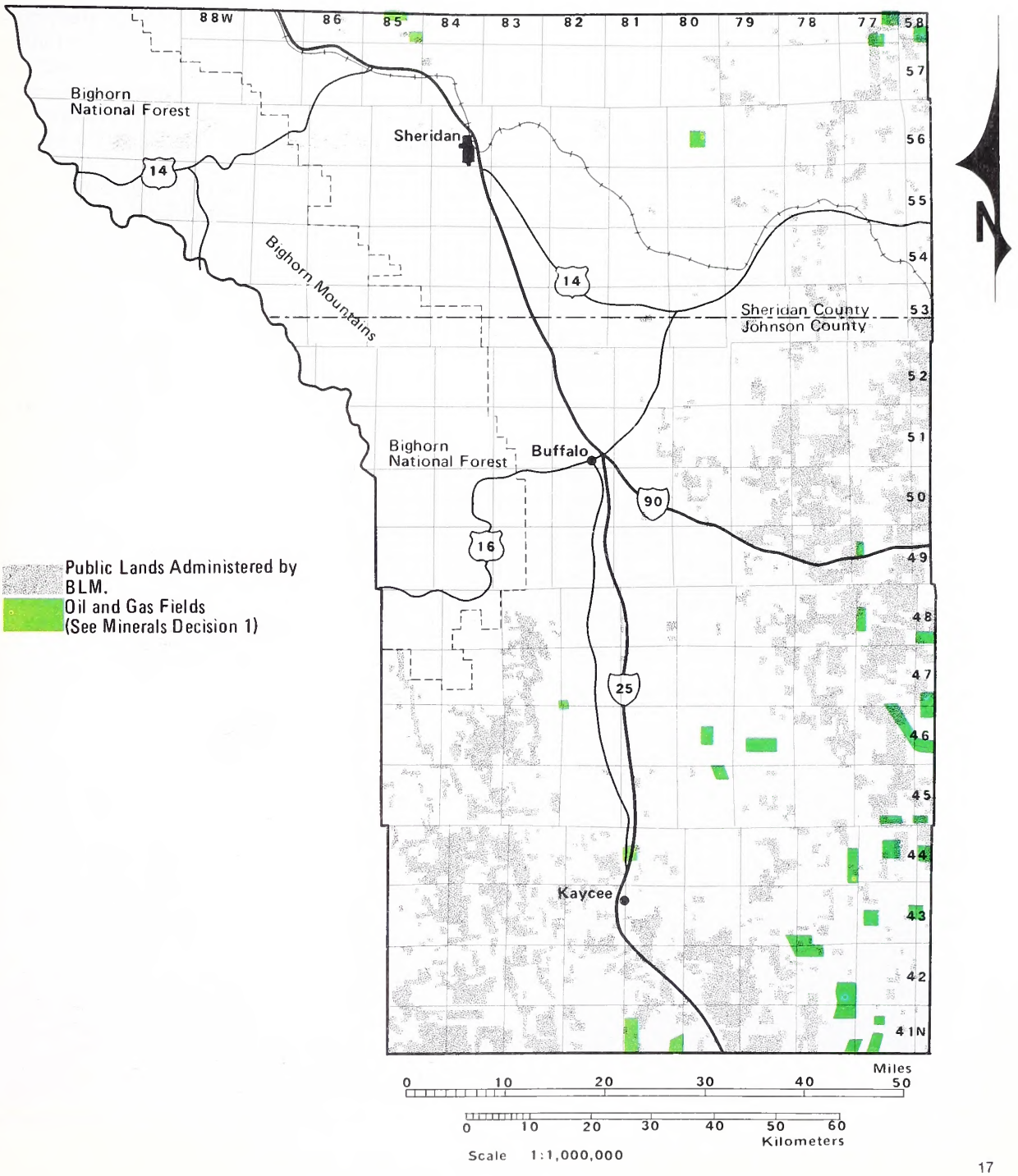
**Rationale:** Because of scarcity of road construction material in the planning area, county, state and city governments have shown concern that BLM may dispose of material areas needed for future development projects. Therefore, local government agencies will be asked to designate the amount and location of material needed for future projects. Additional material not designated could then be made available through competitive or negotiated sales.

### 3. Moss Rock Common Use Areas. (See Map 8.)

**Designate certain areas in Johnson County as Moss Rock Common Use areas.**

**Rationale:** People in the area have demonstrated a consistent demand for moss rock. BLM is proposing to meet that demand by designating certain areas as common use areas. These areas contain sufficient moss rock supply, are accessible and allow for intensive management to facilitate compliance and discourage trespass.

# Map 7
## Existing Oil and Gas Fields



**4. Summary of Oil and Gas Lease Conditions**

**Approximately 98 percent of the federal mineral estate in the planning area will be open to oil and gas leasing subject to general restrictions listed below.**

**Exceptions or modifications to distances and other limitations may be specifically authorized in any year. The operator must apply to and receive exceptions in writing from the District Engineer of the Geological Survey with the concurrence of the Casper District Manager, BLM.**

**Special management areas will have additional site specific restrictions. However, each application for permit to drill will be reviewed to assess its overall impact. (See Map 9.)**

**General conditions:**

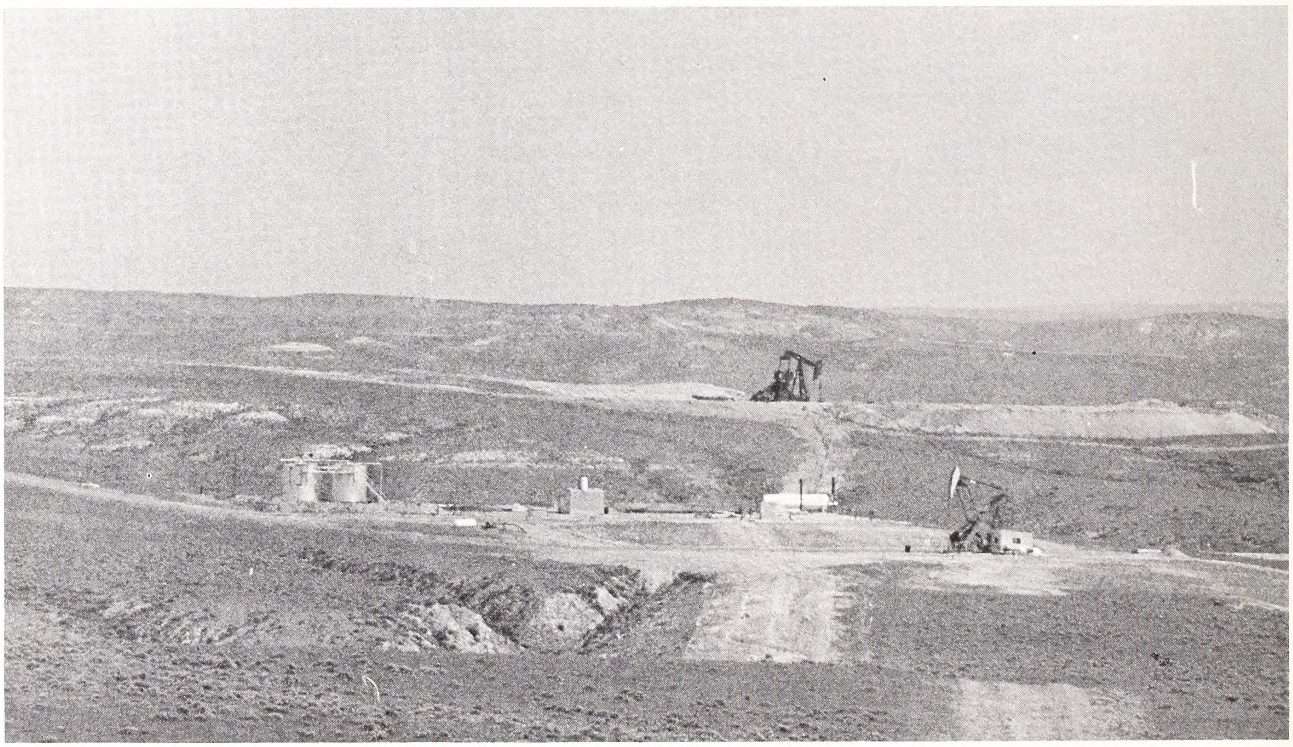
a. No surface disturbance on slopes greater than 25 percent until BLM personnel have inspected and specified stipulations for protection of the watershed. (See "Other Management Decisions," Soil, Air and Water No. 4.)

b. No occupancy or other surface disturbance within 200 feet of state and federal highways and county roads.

c. No occupancy or other surface disturbance within 500 feet of perennial streams. (See "Other Management Decisions," Soil, Air and Water No. 5.)

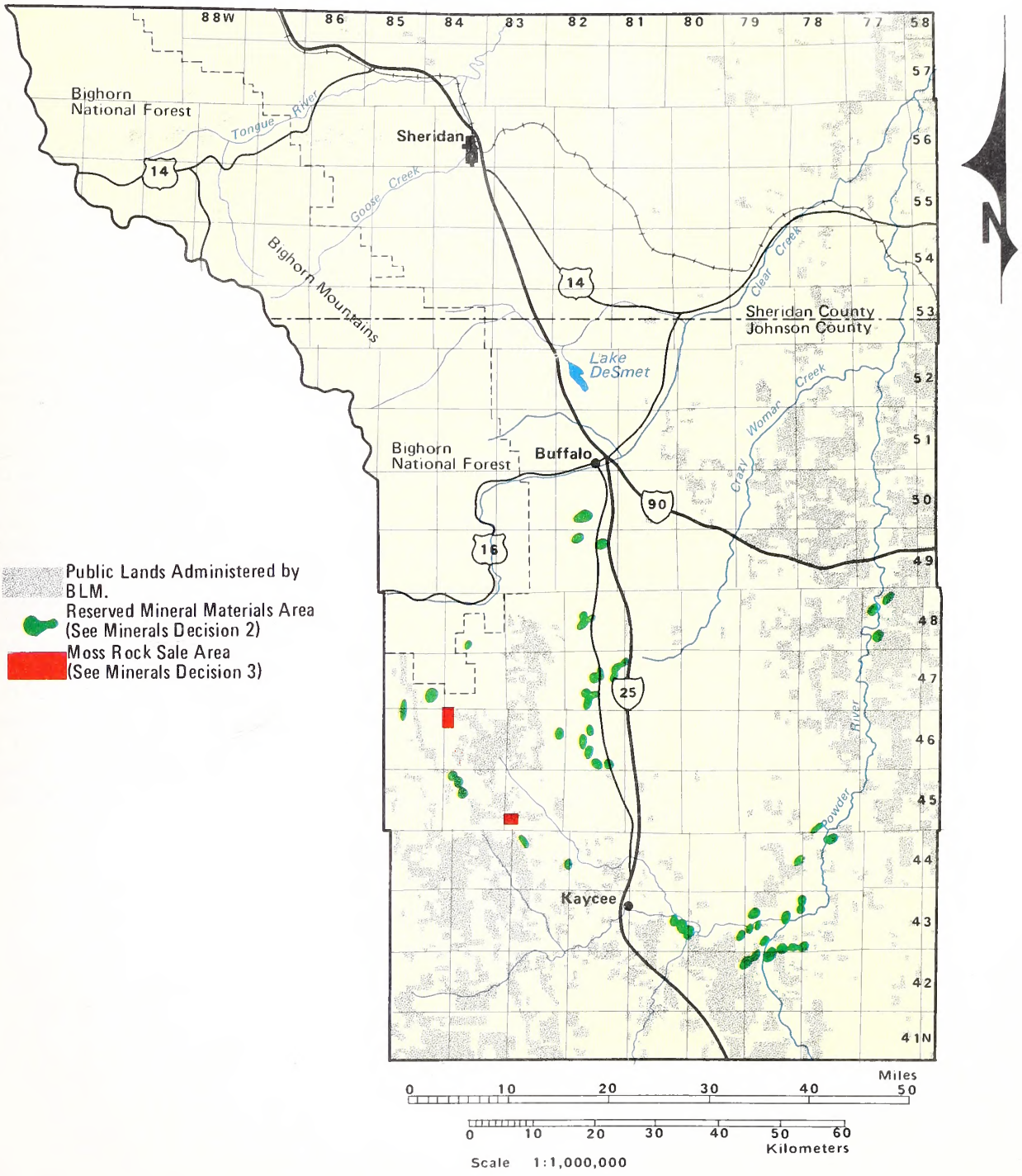
d. No occupancy or other surface disturbance within a one and one-half mile radius of sage grouse strutting or sharptail grouse dancing grounds from March 1 through June 30 to protect nesting areas. No occupancy or activity will be allowed within 250 yards of identified grounds at any time. This limitation does not apply to maintenance and operation of producing oil wells. Exceptions to the above can be authorized by the district manager if circumstances warrant. (See Wildlife Decision No. 2.)

e. No occupancy or other surface disturbance within one-half mile of active raptor (birds of prey) nest sites from March 1 to June 30. (See "Other Management Decisions," Wildlife No. 5.)



**The development of a major oil and gas field such as this one in Johnson County, results in many surface impacts. BLM will develop surface protection plans to minimize these impacts.**

# Map 8
## Mineral Material and Moss Rock Area



**Restrictions and Closures in Special Management Areas**

**a. Middle Fork and Red Wall areas** (See Recreation Decisions No. 1 and No. 2.)

1. Request permission from the Secretary of the Interior to close the existing "withdrawal area" in Middle Fork Canyon to mineral leasing.
2. Request permission from the Secretary of the Interior to close the northern half of the Red Wall to mineral leasing and close the area to mineral entry under the 1872 Mining Law.
3. Apply the following restrictions to existing mineral leases in the closed portions and all mineral leases in the open portions of the Middle Fork and Red Wall management areas:

—Obtain the assistance of the district recreation planner in production facility location to identify visual impacts. No production facilities will be located above-ground in areas evaluated as Class A scenery.

—Place roads on ridges where possible and do not allow side-cast of material on ridgetop roads. If it is necessary to locate segments of roads on sidehills, the location should use a screen of existing vegetation beneath the toe of the fill. Vegetation should screen the road cut from view at a horizontal sight distance of 200 feet.

—Obtain the assistance of the district engineer in road location and crossings of flowing streams to assess the feasibility of construction. Roads are to be constructed to the standards in Wyoming State Office Manual Supplement 3109.

—Avoid construction through juniper, mountain mahogany or other timber stands, unless the vegetation is to be used to screen the disturbance as discussed in No. 2 above.

—Drill no wells on ridges where skylining will occur. Move proposed ridgetop well-sites to other locations to avoid skylining facilities.

—Allow no new overhead powerlines. An overhead extension of an existing overhead line may be allowed by the district manager.

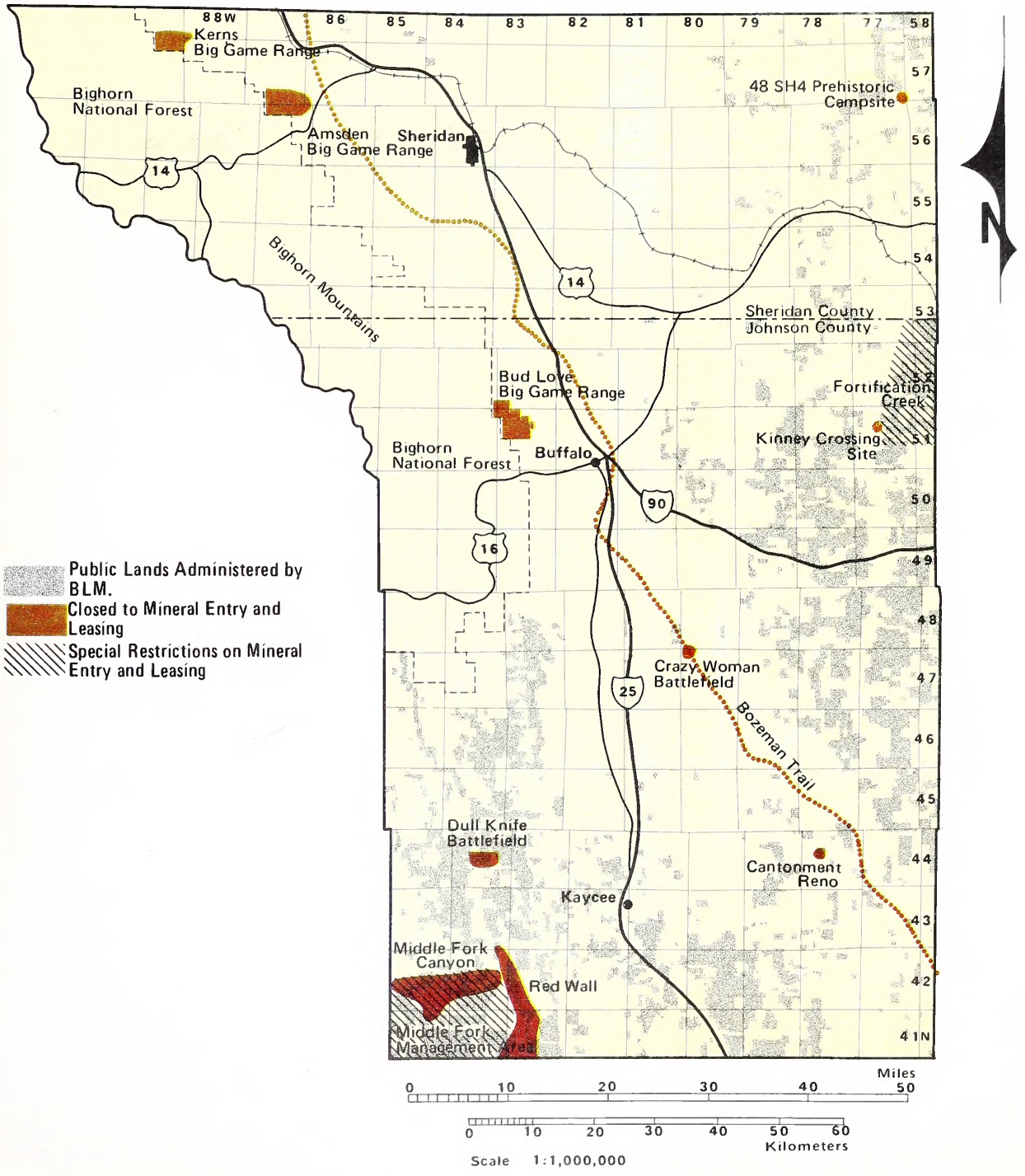
—All production facilities will be painted in earthtone colors, complementary to colors of the natural landscape at the site.

—All equipment will be muffled so that sound pressure levels at 100 feet from the source do not exceed 65 decibels. Subsurface mufflers may be required.

—Waterbars are required whether the well is a dry hole or a producer. Waterbar locations will be designated on the ground. Waterbars will be constructed at the top of the backslope and at the top of the foreslope, with a ditch at the bottom of the backslope. They will be constructed on the contour, approximately one and one-half feet deep into undisturbed land, will be compacted and constructed so they drain onto established vegetation. Bar at top of backslope should be 3 to 4 feet back from edge of cut.

—Drilling will be allowed only between July 1 and November 30 to protect watershed and wildlife values.

# Map 9
## Summary of Closed and Restricted Areas—Mineral Entry and Leasing



**b. Bud Love, Amsden and Kerns Big Game Ranges.** Withdraw these three areas, which total 4,660 acres, from mineral entry under the 1872 Mining Law and lease with no surface occupancy. (See Wildlife Decision No. 1.)

**c. Fortification Creek.** Oil and gas development will be allowed in the Fortification Creek Area only where on-the-ground inspection indicates mineral development can take place without destroying critical watershed, wildlife and natural values.

**d. Significant Cultural Sites —** the Bozeman Trail, Cantonment Reno, Crazy Woman Battlefield, Dull Knife Battlefield, the Kinney Crossing Site and 48SH4 (an extensive prehistoric campsite). Withdraw the above areas and a one-quarter-mile buffer zone surrounding the sites from mineral entry under the 1872 Mining Law and lease with no surface occupancy. An additional one-half-mile scenic corridor will be maintained around each area. Facilities within these corridors should be camouflaged to be compatible with the surrounding scenic values. (See Recreation Decision No. 3.)

**e. Dry Creek Petrified Tree Area.** Twenty-five (25) acres in the Dry Creek Petrified Tree area will be closed to mineral entry under the 1872 Mining Law and lease with no surface occupancy.

**Rationale:**

**General Restrictions:**

Areas with a 25 percent or greater slope are highly susceptible to erosion because of slope, shallow soils and sparse vegetation. The cost of protective measures should be a deterrent to activities on such slopes.

Areas within 200 feet of county and state roads will not be developed for safety reasons.

Areas within 500 feet of perennial streams will not be developed because of hazard of oil spill pollution.

Grouse strutting and dancing grounds and raptor nesting sites are crucial to the maintenance of populations in the area. The months of March, April, May and June are when grouse strut or dance and raptors nest. Activity that disrupts this will adversely affect the populations.

**BLM management decisions will protect crucial elk habitat in three big game ranges, including the Bud Love Big Game Range along the Bighorn Mountains in western Johnson County.**

**Special Management Areas:**

**1. Middle Fork-Red Wall Areas.** The purpose of the restrictions and closures is to protect natural values until specific management plans can be developed for these areas. (See Recreation Decisions No. 1 and No. 2.) Oil and gas exploration and/or mineral development would conflict with the management and protection of the area for recreational, watershed, wildlife habitat, cultural and scenic values. According to the U.S. Geological Survey, the possibility of discovering oil and gas and other energy minerals in economic quantities is remote. Further public participation will be involved in development of the specific management plans.

**2. Big Game Ranges.** (See Rationale for Wildlife Decision No. 1.)

**3. Fortification Creek.** This decision is unchanged from the 1975 decision in the Northeast Wyoming MFP. The area contains critical watershed, unique wildlife (elk) and other natural values. It is also considered to have good potential for oil and natural gas. Public opinion on how to manage the area was mixed. Both development and protection was supported. The decision represents a compromise between these two extremes. Implementation of this decision will require more lead time than existing mineral leasing procedures and closer coordination with the BLM State office and USGS.

**4. Significant Cultural Sites.** The identified cultural sites contain unique values that are representative of significant prehistoric and historic events in the planning unit.

**5. Dry Creek Petrified Tree Area.** This site contains numerous petrified tree stumps and has high potential as an environmental education area.

## RANGE MANAGEMENT

### Program Description

The range management program deals with the inventory, evaluation and management of the vegetative resources on public lands. The program includes authorization and supervision of livestock grazing use, development and maintenance of livestock management facilities and protection of the range from weed infestations, pests and disease.

Livestock have been grazed in the planning area for more than 100 years. Most of the pioneers in the ranching industry acquired ownership of the surface estate but not the mineral estate through the Stockraising Homestead Act of 1916. Most of the mineral estate remains in public ownership.

### Resource Description

Public lands produce five percent of the required livestock forage in Johnson County and one percent in Sheridan County. This accounts for 58,898 animal unit months of forage produced on public lands. The total forage produced on federal range is insignificant overall but is a critical part of many ranch operations.

The livestock forage on the public lands contributes to the economic stability of 242 ranch operations (171 in Johnson and 71 in Sheridan). Nearly all of the public land administered by BLM in this planning unit is grazed by domestic livestock at some time during the year.

Range improvement projects such as water developments and fencing are needed to properly utilize these lands for domestic livestock grazing. Only half the public range lands have adequate livestock water. Some leases may be used only during winter when snow is the only source of livestock water.

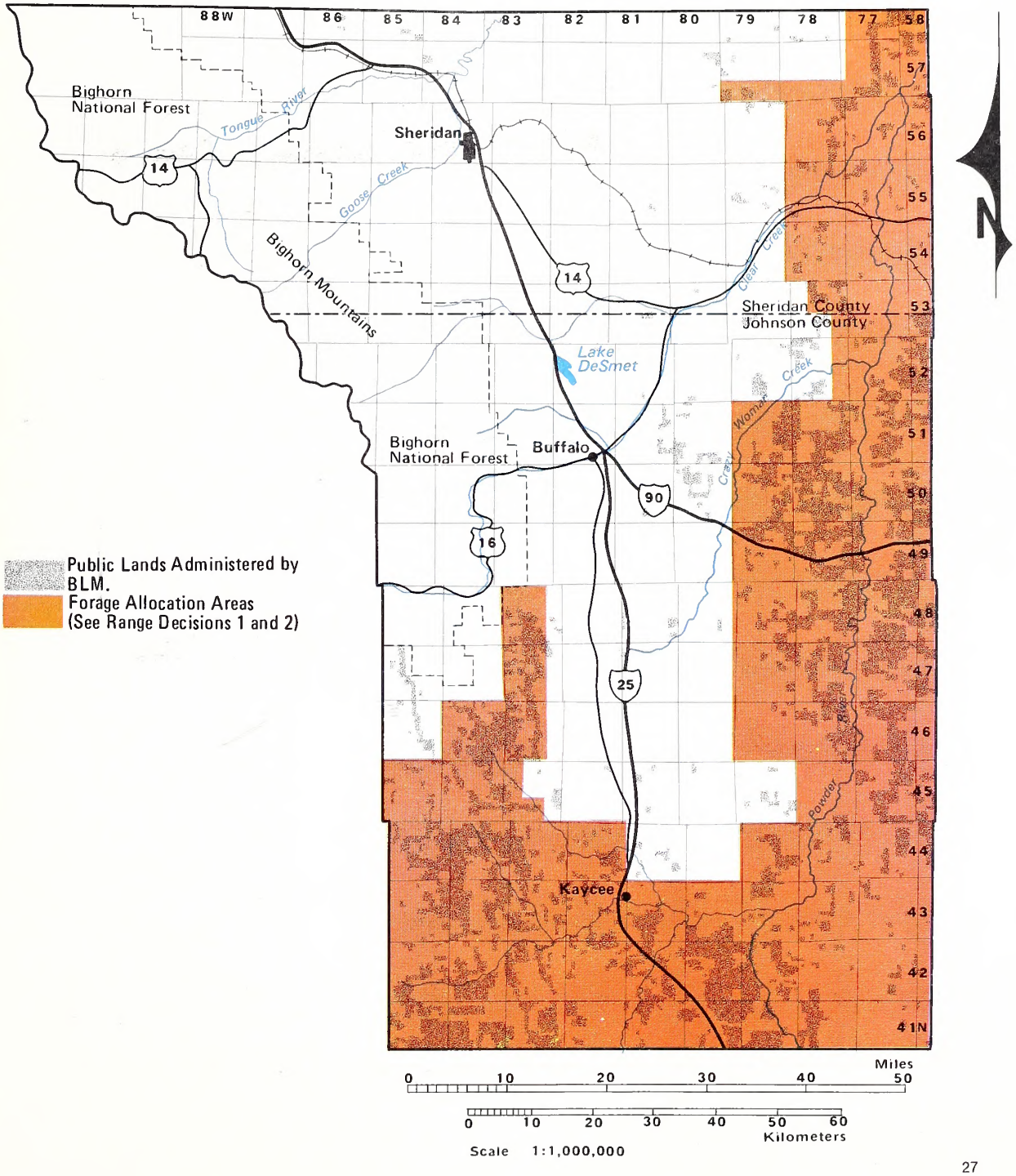
The livestock forage produced on public land is not the same as the total herbage produced. Where range condition is low, most of the herbage produced is not suitable for livestock consumption. Where range condition is improving, an increasing amount of herbage produced is valuable livestock forage. The range condition could be improved on most of the public land in the planning area.

### Multiple Use Objective

Manage areas suitable for allotment management plans to increase livestock forage and improve both watershed and wildlife habitat. Maintain areas designated for "custodial management" in a satisfactory condition.

**Range management decisions will mutually benefit livestock and wildlife.**

# Map 10
## Forage Allocation Areas



## Multiple Use Decisions

### 1. Forage Allocation. (See Map 10.)

**Allocate sufficient forage to meet the demands of wildlife and livestock numbers. Additional forage developed as a result of intensive management after allocations to protect watershed will be allocated accordingly between the livestock and wildlife.**

**Rationale:** A National Resources Defense Council/Bureau of Land Management court agreement calls for allocation of forage for watershed, wildlife and domestic livestock range. The agreement calls for an environmental statement to be developed to assess the impacts of forage allocation.

### 2. Conduct Trend and Utilization Studies on Grazing Allotments Scheduled for Forage Allocation. (See Map 10.)

**Establish trend and utilization studies on those areas scheduled for forage allocation. Obtain actual use records and determine grazing use patterns on those areas.**

**Rationale:** The information gained from these studies will provide baseline data for forage allocation. If the proper stocking rate for an allotment is known, BLM will be able to determine whether existing management is improving the range condition. In many cases existing management may be accepted as is.

### 3. Weed Control

**Establish a weed control program in cooperation with the county weed and pest control boards for control of noxious weeds and poisonous plants on public lands and adjoining private land.**

**Rationale:** Weed control is becoming increasingly important as human populations increase. Noxious weeds from public lands can spread onto private land and vice versa. A cooperative State/BLM program is needed to develop an effective weed control program.

### 4. Grasshopper Control.

**If grasshopper infestations develop on public lands and threaten crops or forage, BLM will cooperate with local, state and federal agencies on control measures. All grasshopper control programs on public lands will be monitored by BLM to ensure compliance with stipulations. No spraying will be allowed over or within one-quarter-mile of live water or drainages leading into live water.**

**Rationale:** Grasshopper control is necessary in some areas to prevent severe damage to livestock and wildlife forage and to the watershed.

## FOREST PRODUCTS

### Program Description

The forestry program includes inventory, evaluation, management and protection of the district's forest resources. The program's primary objectives are to produce timber and sustain the stands for watershed protection, wildlife habitat and recreation values. BLM conducts sales for timber, posts, poles, firewood and other vegetative products and takes measures to control timber trespass and forest pests.

A stand of Douglas-fir along Hazelton Road in the Bighorn Mountains.

An untreated mountain pine beetle area.

A dense stand of lodgepole pine in the southern Bighorns would grow to commercial sizes if thinned.

## Resource Description

The forested public lands are concentrated in the southern Bighorn Mountains as well as along the eastern face of the Bighorns. Some nonproductive forest land is located in the Powder River Breaks in eastern Johnson and Sheridan counties and along Pine Ridge near Kaycee. In addition, forest land is also located on Tisdale Mountain south of Kaycee.

Commercial species located on these forest lands are: ponderosa pine, Douglas-fir, Englemann spruce, subalpine fir and lodgepole pine.

There are 32,000 acres of productive forest land in Johnson County and 1,700 acres in Sheridan County. Productive forest land is defined as capable of producing 20 cubic feet of wood per acre every year. There are 7,800 acres of nonproductive forest land in the two counties. These acreages can support trees but cannot grow 20 cubic feet of wood on an acre every year.

All forested public lands are valuable for wildlife habitat and protection of watershed and recreation values. Deer, elk, small game and birds use these areas extensively. Tree roots help hold soil in place which helps control soil erosion. Openings within a stand trap snow being "blown over" the stand. This along with shade produced by the trees helps increase and prolong water runoff.

Forested areas directly benefit recreation by adding color and variety to scenic values and by providing desirable areas for activities such as camping and hiking.

## Multiple Use Objective

Manage forested areas for timber production while maintaining or enhancing watershed, wildlife and recreation values.

## Multiple Use Decisions

**1. Timber Management Areas. (See Map 11.)**

**Prepare a timber management activity plan for 13,000 acres in Johnson County to accelerate the cut of overmature timber through 1984. Potential volume available is 6 million board feet. Update the plan in 1983 to provide for sustained yield management.**

**Rationale:** This timber management will accomplish four objectives: 1) Clean up decadent stands of overmature ponderosa pine; 2) enhance wildlife habitat by clearing out clogged undergrowth areas; 3) reduce insect control problems; 4) meet part of the area's need for timber products.

**2. Timber Thinning Areas. (See Map 11.)**

**Conduct thinning operations on young lodgepole pine on 3,000 acres of public land in the following areas: The Horn, Fisher Springs, Sawmill Creek, Red Springs, Hazelton Stock Trail, Rome Hill Road, Bull Creek, Dull Knife Reservoir and Billy Creek. About 1,000 board feet per acre will be thinned from each site.**

**Rationale:** Thinning operations are needed to release the timber from stagnation and increase useful timber volume and open the area up to improve big game habitat.

**3. Insect and Disease Control. (See Map 12.)**

**Combat insect (primarily the mountain pine beetle) and disease buildups by harvesting infested stands if possible.**

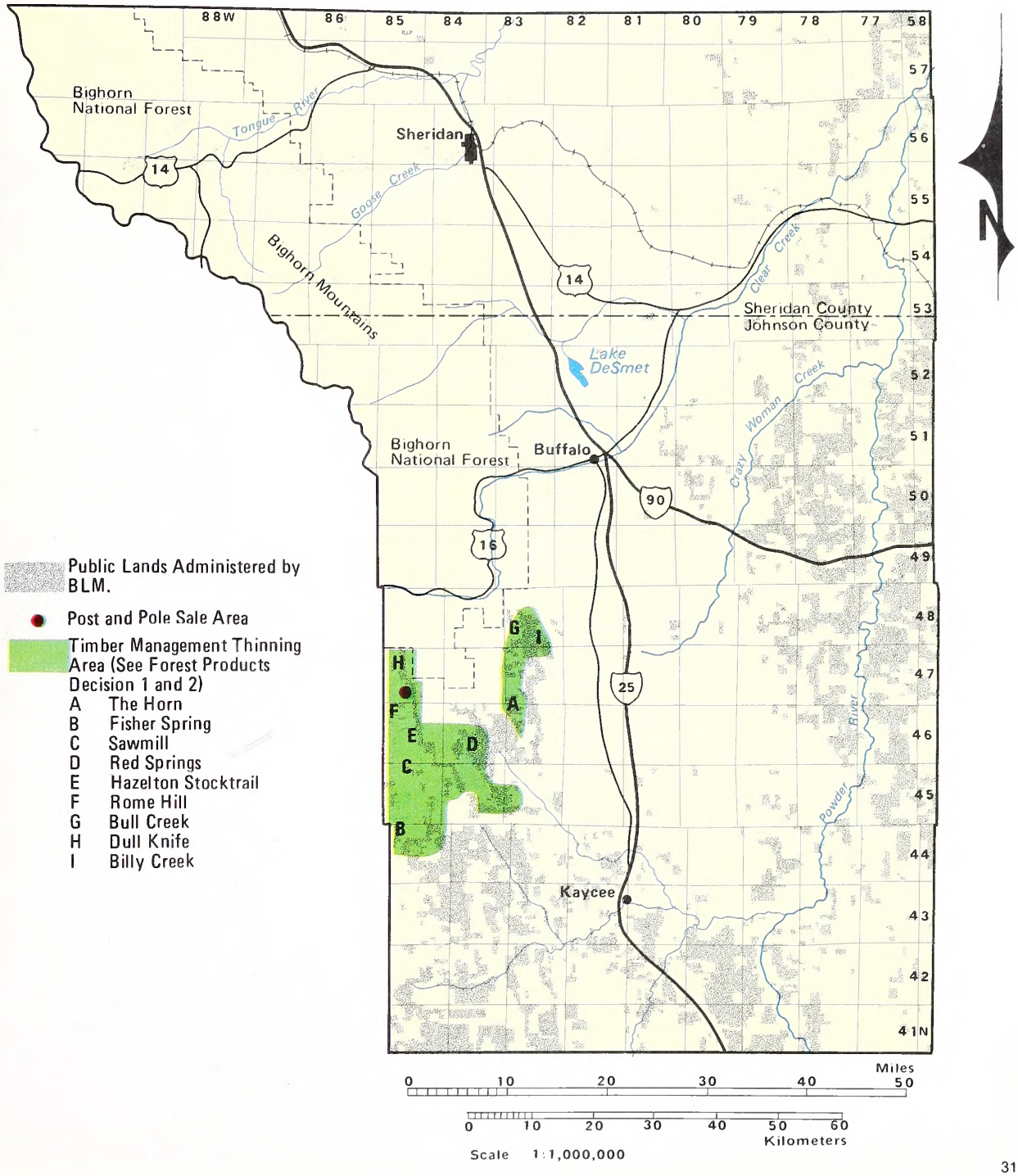
**Rationale:** The majority of disease and insect problems can be handled most effectively through a timber sale program. An additional benefit to a timber sale is that the wood fiber is used and not wasted.

**4. Post and Pole Sale Area. (See Map 11.)**

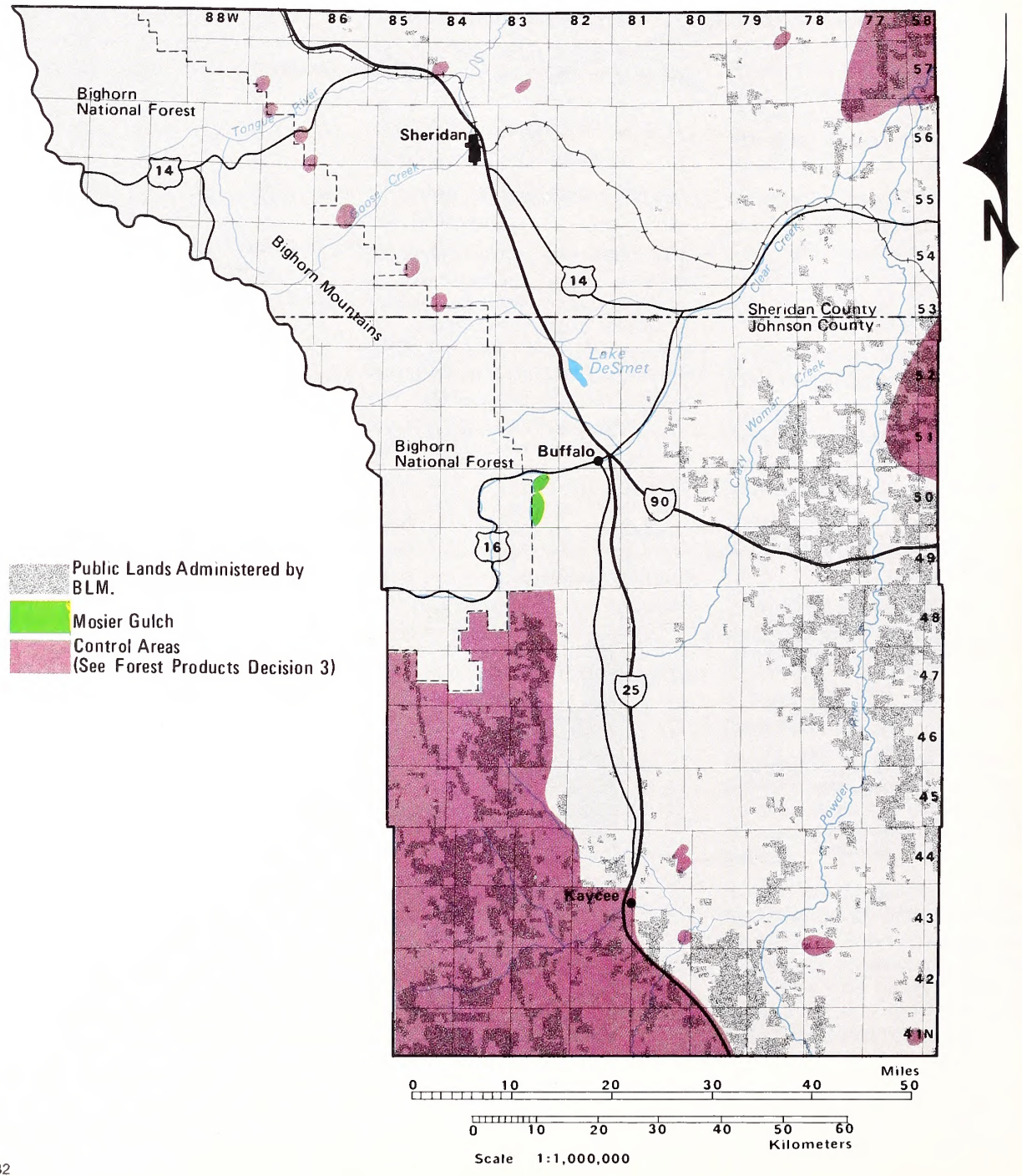
**Designate a 15-acre timber stand in the Dull Knife Area as an area for local citizens to obtain post and poles via BLM permit.**

**Rationale:** By identifying certain stands as post and pole sale areas, the time required for permit processing will be less than one hour. This is also an economical method of thinning stands in the area.

# Map 11
## Timber Management and Thinning Areas



# Map 12
## Forest Insect and Disease Control Areas



## SOIL, WATER, AIR

### Program Description

Soil, water and air management requires management of other land use activities to maintain the quality of these resources. Watershed management has to consider the interrelationships of soil, vegetation and water and how these resources are affected by various land uses. Management of watershed involves prescribing a specific land use, non-use or modification of vegetative cover for improvement, maintenance or protection of watershed quality.

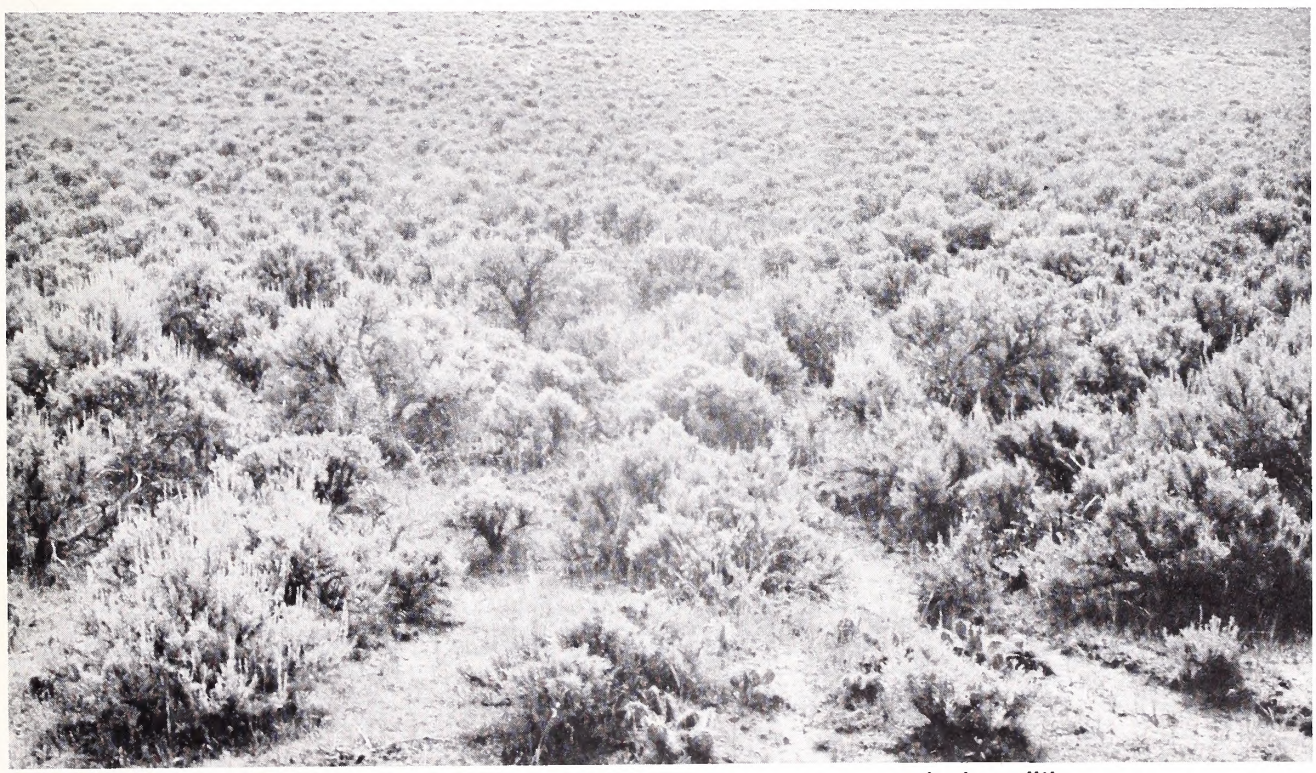
### Resource Description

The erosion condition and trend was inventoried on 62 watersheds within the planning area. The erosion trend seems to be deteriorating. Many factors are involved which govern the condition and trend of watershed areas. Some of these factors are: type and degree of land use, soils, vegetation, precipitation and topography.

Land use is the main factor affecting watershed conditions and trends. However, there are methods to lessen watershed deterioration and still allow land use activities. These methods include: intensive livestock management, protective stipulations on surface disturbances and intensive management of areas with severe erosion susceptibility.

### Multiple Use Objectives

Manage watersheds for stabilization of soil resources, maintenance and restoration of soil productivity, enhancement of water yield and quality and reduction of flood sediment damage. Reduce impacts to watershed values through stipulations in authorizations of other resource activities.



**Watershed tillage in this area will improve perennial grass coverage and watershed conditions.**

## Multiple Use Decisions

**1. Establish Intensive Livestock Management Prior to Watershed Treatment.**

**Watershed management systems will be so designed that livestock can be removed from treated areas during the growing season for two consecutive years.**

**Rationale:** To ensure treatment success and improve the cost benefit ratio of mechanical and chemical treatment, livestock must be intensively managed. Opportunities for watershed improvement are available with mechanical and chemical treatment of some areas, but without intensive livestock management the effectiveness of the treatment is lowered and the cost will exceed the benefit. If cost exceeds benefits and treatment is not attempted, the opportunity for watershed improvement is lost and erosion will continue.

**2. Mechanical Treatment to Improve Watershed Condition in Remington Creek. (See Map 13.)**

**Conduct mechanical removal of sagebrush on Remington Creek watershed in Sheridan County under the following constraints: all vegetal treatment, either mechanical or chemical, will be accepted only after intensive grazing systems have been developed and only after studies have deemed it necessary. The removal of livestock grazing on the treated areas for the first two years can be accomplished in coordination with the rotation system developed under the intensive grazing management plan.**

**Rationale:** High sagebrush composition in the area is hampering watershed improvement and consuming excessive quantities of water. Control of sagebrush will allow for increased vegetative vigor of the grass type vegetation and stabilize eroding soils. However, mechanical treatment of this type is too expensive to be carried out without controlling grazing use in the treated area via an intensive management plan.

**3. Construct Water Control Devices to Reduce Runoff and Control Erosion in Seven Watersheds. (See Map 13.)**

**Construct water control devices to reduce runoff and control erosion on public lands in the following seven watersheds: Cottonwood Creek, Rock Ridge, Sale Creek, Four Mile Creek, Big Willow Creek, Lower Four Mile Creek and Crazy Woman Creek. To ensure success, livestock management systems will be implemented prior to construction.**

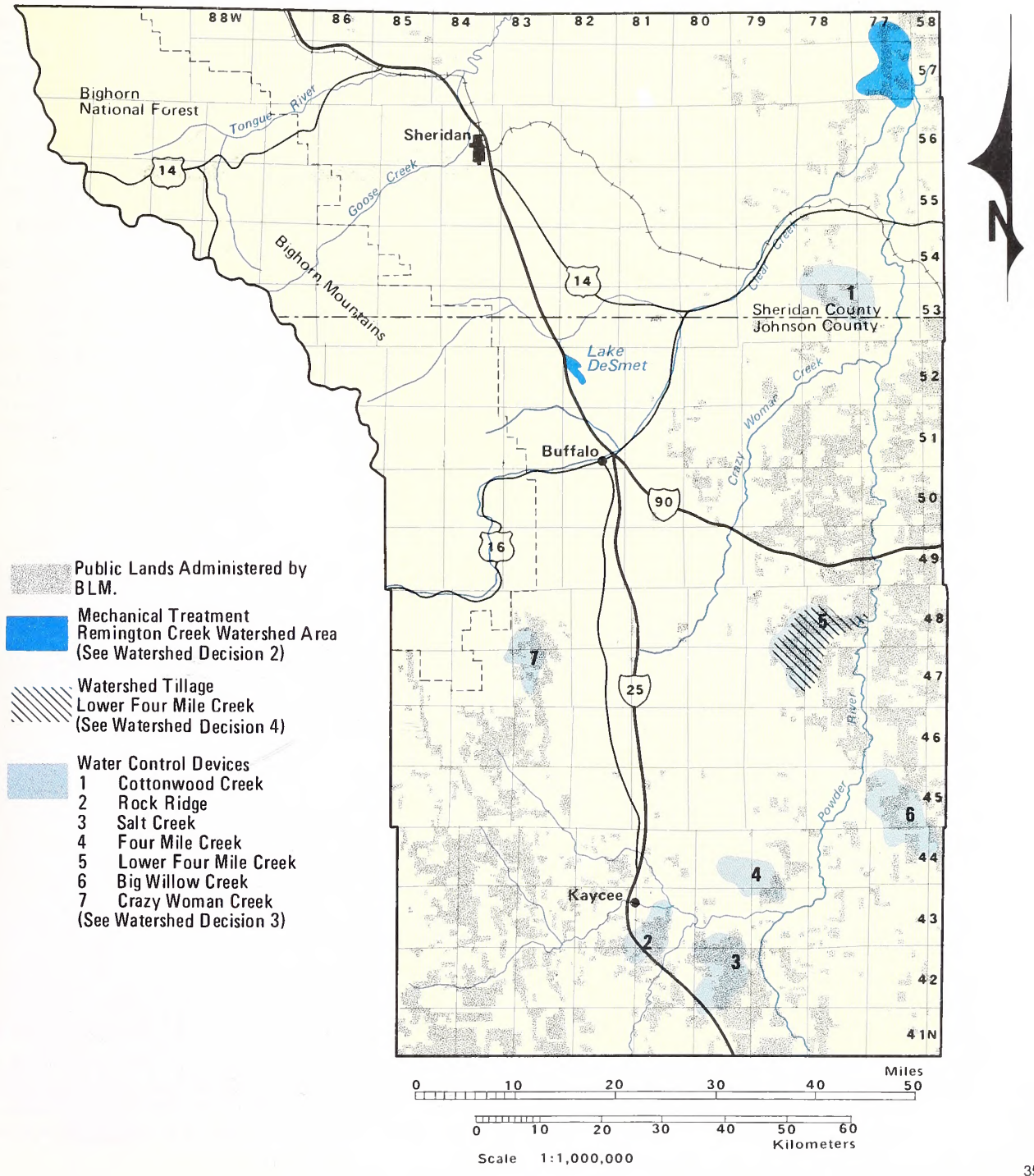
**Rationale:** Watershed conditions can be improved on these areas with the construction of water control devices to control runoff. Control of runoff will lessen rill and gully erosion which is the most serious problem on these watersheds.

**4. Watershed Tillage. (See Map 13.)**

**Conduct watershed tillage to lower soil loss and improve infiltration on public lands in the Lower Four Mile Creek watershed. To ensure success of the treatment and to improve the cost benefit ratio the area will be intensively managed for livestock grazing prior to tillage operations.**

**Rationale:** Watershed tillage will control runoff, increase soil infiltration rate, improve water holding capacity and increase vegetative cover which will stabilize soil condition and reduce soil loss in this watershed.

# Map 13
## Watershed Improvement Areas



## RECREATION

### Program Description

In outdoor recreation there are two basic components: the visitors (their behavior, motivations and perceptions) and the resource (its potential and limitations for recreation). BLM carries the responsibility of the management of the two components to harmoniously meet the needs of the visitor and the resource. Presently the recreation program directs its efforts to hunting, fishing, camping and protection of cultural and visual resources.

Within Sheridan and Johnson counties the following are types of management taking place under the outdoor recreation program: protection of visual resources through rehabilitation measures on oil and gas leases, protection of National Register and other significant cultural sites, cooperative programs with the Wyoming Game and Fish Department and private landowners to increase recreational opportunities on public land, as well as access to recreation areas and interpretive facilities for visitor education.

### Resource Description

The recreation resource is located primarily in two areas, the southern Bighorn Mountains and the Powder River Breaks.

The southern Bighorns offer the most diverse opportunities. The area hosts excellent fishing and hunting, as well as sightseeing and camping. Cultural resources and various National Register sites can be found. The Middle Fork Powder River Management Area, which includes the Ed O. Taylor Big Game Winter Range, is the primary recreation area used by the public. The Powder River Breaks are nationally known for hunting. In addition, fishing on public land throughout Sheridan and Johnson counties is a prime recreation resource. The planning area has Class A streams and potential for increased reservoir fisheries.

### Multiple Use Objective

Protect the scenic, cultural and wildlife values on public land in Johnson County while maintaining traditional multiple uses including mineral exploration and development. Also, provide a quality experience for the recreationist who seeks a natural type setting.

**BLM will develop an environmental education site in the Billy Creek area. Decisions will protect grouse strutting and dancing grounds.**

# Map 14
## Middle Fork and Red Wall Areas

## Multiple Use Decisions

**1. Develop a Management Plan for the Middle Fork Powder River Area. (See Map 14.)**

**Develop and implement a management plan for the Middle Fork Powder River Area that will protect outstanding scenic, cultural and wildlife values while maintaining compatible multiple use activities. The plan will provide for: 1) management of visitor use; 2) maintenance and protection of livestock use; 3) protection and improvement of crucial big game range; 4) presevation of timber stands for aesthetic values and wildlife habitat; 5) protection of stream banks to maximize fish habitat; 6) regulation of access during hunting seasons; 7) request permission from the Secretary of the Interior to close the existing "withdrawal area" to mineral leasing; and 8) restrictions on mineral leasing and entry for open areas and existing leases in the closed area.**

**Rationale:** The Middle Fork Powder River Area presently has public access. Visitor use is increasing at the rate of 10 percent a year. According to BLM's planning area analysis for Sheridan and Johnson counties, visitor use will increase 38 percent on all public lands in these two counties by the year 1990. Because of the appealing characteristics of the Middle Fork Area, it is anticipated that visitor use will increase at least 10 percent a year. Currently, there are few controls and no use supervision in the area. As a result, cultural sites have been damaged and off-road vehicle use is damaging the fragile watershed, rangelands and wildlife habitat. Uncontrolled motor vehicle travel is threatening the existing natural state of the Middle Fork Area. If a multiple use management plan is not developed to protect the values and to facilitate anticipated increased visitor use, the unique values of the Middle Fork Area will be drastically reduced and in some cases lost.

Part of the Middle Fork Management Area has been withdrawn from mineral entry. Under this decision that part would also be closed to mineral leasing.

Oil and gas exploration and/or mineral development would conflict with the management and protection of the area for its recreational, watershed, wildlife habitat, cultural and scenic values. According to the U.S. Geological Survey, the possibility of discovering oil and gas and other energy minerals in economic quantities is remote. Further public involvement will be conducted concerning the specific details of the Middle Fork Management Plan.

Portions of the Middle Fork decision area fall in Washakie County, administered by the Worland district, and Natrona County, administered by the Platte River Resource Area, Casper district. By agreement with the Worland district, the Casper district has the lead role in planning and management of the Middle Fork Area. Decisions related to lands in Washakie County are final. Decisions related to land in Natrona County could be modified in the Natrona MFP which is currently being prepared. The Natrona County portions are shown on the maps because the area is one logical management unit.

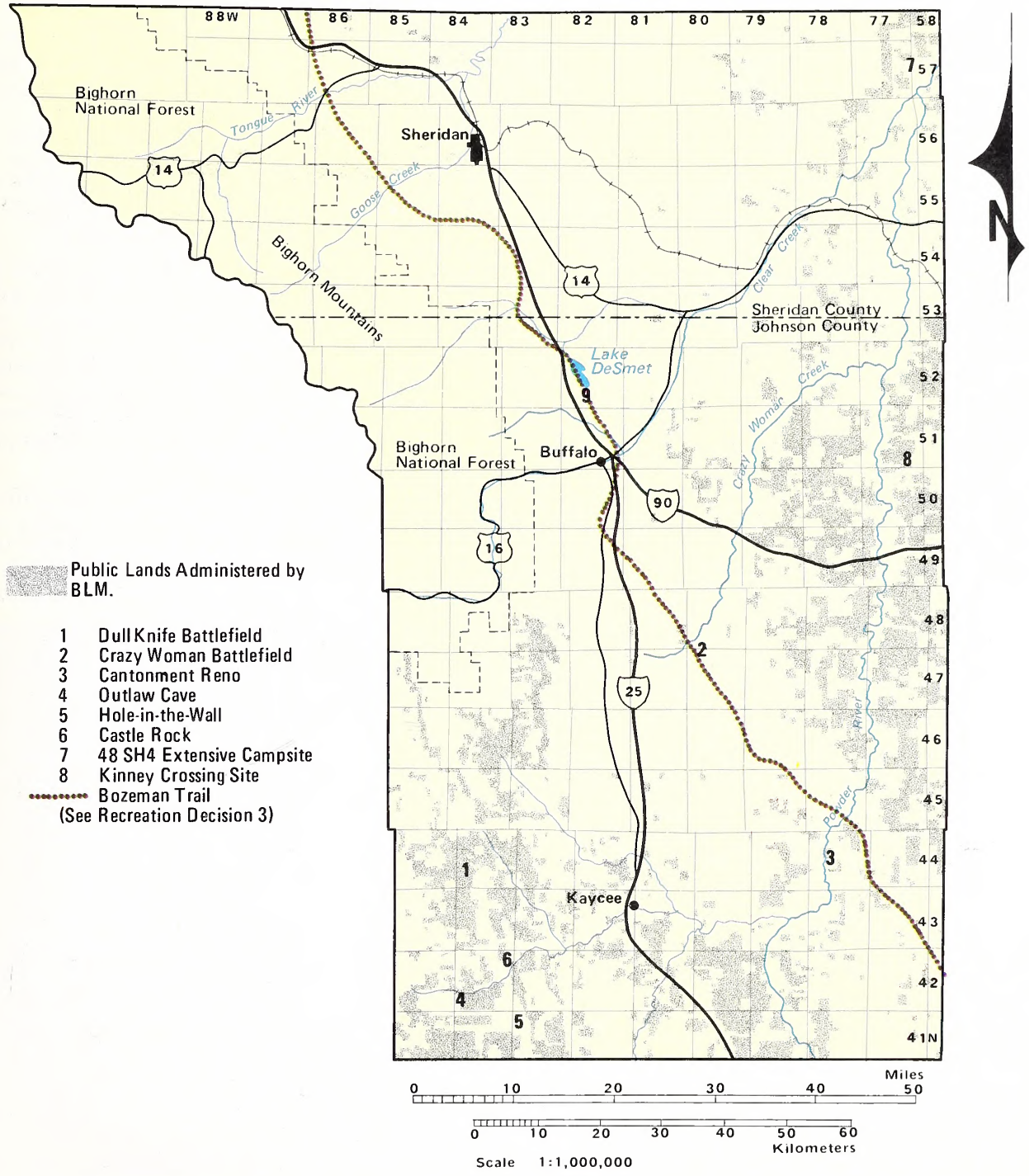
**2. Develop a Management Plan to Protect Unique Values in the Red Wall Area. (See Map 14.)**

**Evaluate the Red Wall for special management consideration. Nominate appropriate parcels to the National Register of Natural Landmarks. Close federal mineral estate in the northern half of the Red Wall to mineral leasing and entry under the 1872 Mining Law.**

**Rationale:** The area known as the Hole-in-the-Wall and the Red Wall are outstanding natural landmarks. The entire area has a high scenic quality. The Red Wall provides crucial raptor habitat and the area contains many significant historical and archeological features. The soils in the area are very erosive. Consequently this area needs to be protected from development activities that would adversely impact these values.

A portion of the Red Wall decision area is in Natrona County and could be modified by the Natrona County MFP currently being prepared.

# Map 15
## Plan to Protect Cultural Sites



**3. Develop a Plan to Protect the Planning Area's Significant Cultural Sites. (See Map 15.)**

**Develop an area-wide management plan for protection of significant cultural sites in the planning area by 1982. Historical areas that will be addressed in the area-wide plan are: the Bozeman Trail, Cantonment Reno, Crazy Woman Battlefield, Dull Knife Battlefield, the Kinney Crossing Site, Outlaw Cave, Hole-in-the-Wall, Castle Rock and 48SH4 (an extensive prehistoric campsite). In order to protect the areas from adverse impacts while these plans are being developed, BLM will withdraw the above areas and a quarter-mile buffer zone surrounding the sites from mineral entry under the 1872 Mining Law and lease with no surface occupancy. An additional one-half-mile scenic corridor will be maintained around each area. Facilities within these corridors should be camouflaged to be compatible with the surrounding scenic values.**

**Rationale:** The above cultural sites have potential for inclusion in the National Register of Historic Sites. BLM plans to evaluate the potential of each site and nominate those that are significant enough for inclusion in the National Register. Interim protection measures are needed pending completion of the management plan and action on National Register nominations.

**4. Develop an Environmental Education Area in the Billy Creek Area. (See Map 16.)**

**Take the following actions to develop an Environmental Education Area in the Billy Creek Area: 1) develop sanitary facilities at the loop end of the Billy Creek Road; 2) develop walking trails beginning at the end of the loop road through a logging area along the face of the Bighorns through various vegetative types to be used for environmental education purposes; 3) install appropriate interpretive and directional signs.**

**Rationale:** Officials from the Johnson County School Department have shown an interest in developing an environmental education area that would visually display multiple-use activities in a small area. This area is ideal in that it displays timber harvests and rehabilitation, livestock grazing, wildlife habitat, scenic values and geologic structures. In addition it affords an outstanding scenic overlook of the entire Powder River Basin.

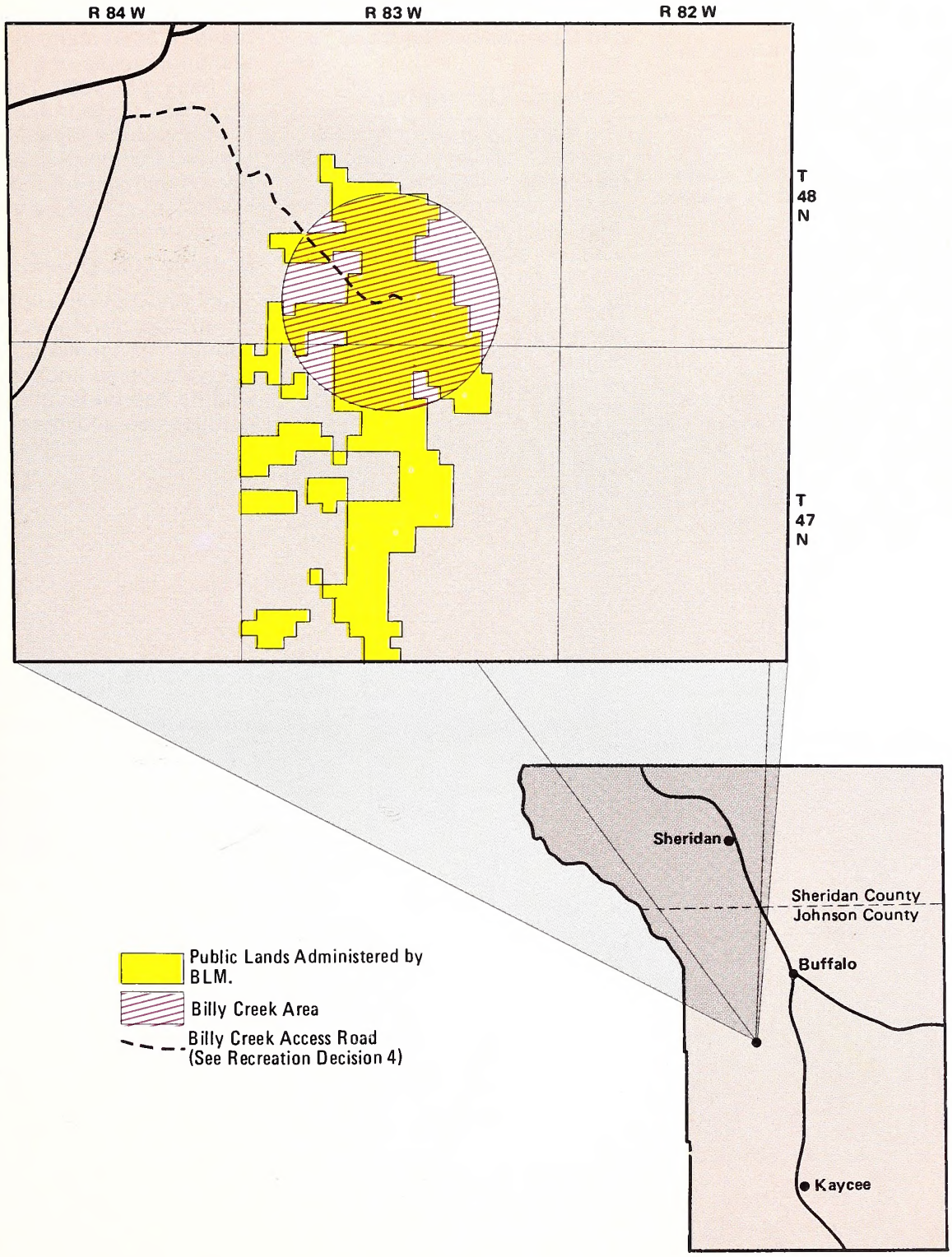
**5. Evaluate the Fortification Creek Area (see Map 9) for special management consideration.**

**Rationale:** The majority of the area is in the Powder River Breaks and contains sharp, rough, dry ridges and ephemeral drainages. The topography provides high scenic values and results in a very fragile watershed with high erosive potential.

There is a native resident elk herd of 200 head in the area which represents one of only a few herds in the nation still living in their original grassland condition. The area also provides habitat for 1,000 deer, 125 antelope and 2 sharptail grouse dancing grounds.

This area overlaps into the Eastern Powder River Basin area and is also covered in the brochure summarizing the land use decisions for that area.

# Map 16
## Environmental Education Area



## WILDLIFE

### Program Description

The public lands provide a wide variety of important habitat for both terrestrial and aquatic wildlife. Elk, mule and whitetail deer, antelope and bighorn sheep roam the area on grassland, sagebrush and coniferous forest habitats. Other important wildlife species include sage grouse, wild turkey, pheasants, waterfowl, various birds of prey and a variety of nongame species.

The importance of fisheries habitat is increasing because of population growth within the planning area. BLM works closely with the Wyoming Game and Fish Department and other agencies on wildlife and fisheries habitat management.

### Resource Description

The planning area includes a variety of habitats ranging from grassland to sagebrush to coniferous forests. BLM has a responsibility to manage public lands for maintenance or improvement of wildlife habitat.

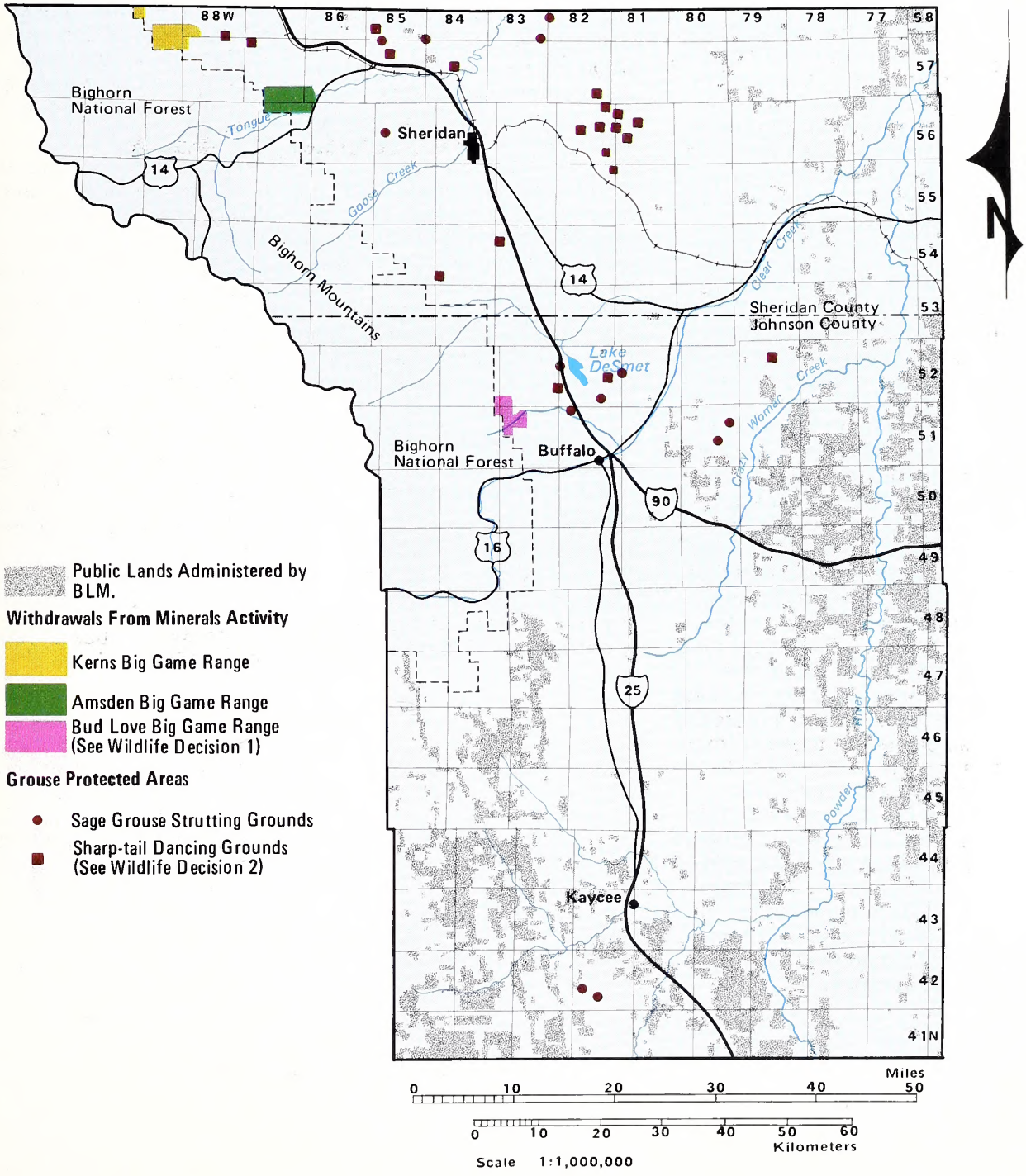
The main objective of the wildlife program is the protection of habitat, on public as well as private surface, from destruction, as a result of federal action.

The Wyoming State Comprehensive Outdoor Recreation Plan predicts a decrease in demand of 38 percent for hunting and an increase of 61 percent for fishing by 1990. This predicted decrease in hunting is contrary to the forecasted increase in population and expected demand for more recreation in Johnson and Sheridan counties.

### Multiple Use Objective

Maintain existing wildlife habitat through development of habitat management plans and reduce adverse impacts on wildlife habitat resulting from multiple-use activities.

# Map 17
## Wildlife Protection Areas



## Multiple Use Decisions

**1. Withdraw Federal Mineral Estate in Three Big Game Ranges From Mineral Entry and Lease with No Surface Occupancy. (See Map 17.)**

**To protect the area from adverse impacts upon very crucial elk winter habitat areas, withdraw the Bud Love Big Game Range, the Amsden Big Game Range and the Kerns Big Game Range from all mineral entry under the 1872 Mining Law and lease with no surface occupancy.**

**Rationale:** These areas provide crucial winter habitat for elk, numerous deer and antelope, chukkars, Hungarian partridge, blue grouse, wild turkey and black bear. BLM administers part of the mineral estate in these areas but the surface of the game ranges are owned and administered by the Wyoming Game and Fish Department. The Game and Fish Department has submitted written opposition to leasing within these ranges. Mineral exploration or other surface disturbing activities would cause the wildlife, especially elk, to abandon the area. This will increase stress placed on these animals lowering the herd's overall health and increasing the chances for its mortality. Also local landowners would sustain crop damages since the wildlife would probably congregate on adjacent private lands. Finally, a decrease in wildlife numbers would decrease hunting opportunities.

**2. Protect Sage Grouse Strutting and Sharptail Grouse Dancing Grounds. (See Map 17.)**

**Allow no surface disturbance or occupancy within a one and one-half mile radius of identified sage grouse strutting grounds and one-half mile from sharptail grouse dancing grounds on public land during mating and nesting periods (from March 1 to June 30). Furthermore, allow no occupancy or other surface activity within 250 yards of these grounds during any time. This limitation does not apply to maintenance and operation of producing oil wells. Exceptions to this limitation can only be authorized in writing by the district manager.**

**Allow no sagebrush control within a one and one-half mile radius of sage grouse strutting grounds.**

**Rationale:** Nearly all sage grouse nesting occurs within two miles of their strutting grounds. Surface disturbance or occupancy during their nesting and breeding periods would disrupt breeding activity and result in subsequent reproductive failure, and possible loss of entire local flocks. Human activities must be minimized during this crucial time. Any energy rights-of-way which cannot be routed around strutting grounds will be constructed only from July 1 through February 28.

Exceptions to these restrictions can be authorized by the district manager if circumstances warrant.

**3. Construct Fences Around New Reservoirs on Public Lands that are Larger than Five Acres in Size.**

**All new reservoirs constructed on public lands that are over five acres in size will be fenced to keep out domestic livestock and to provide a minimum buffer of 5 acres of upland habitat for each surface acre of water. Suitable woody cover species will be planted within these fence boundaries.**

**Rationale:** The use of fences will enhance wildlife cover and will improve water quality.

Existing songbird habitat in the area is poor. Songbird habitat occurs along riparian areas where brushy vegetation occurs. By protecting brushy areas around new reservoirs the amount of songbird habitat will increase.

## OTHER MANAGEMENT DECISIONS

Space requirements of this publication limited detailed discussion to the most significant decisions in terms of resource values and public controversy. A summary of other MFP decisions is presented below. If you are interested in more detail, please contact BLM's Buffalo or Casper offices.

### Lands

**1. BLM will investigate the value of making land ownership adjustments on public land in the following priority order:**

General Public Development
Community Development
Industrial Development
Exchange

### Minerals

**1. Following consultation and agreement with affected private landowners, designate areas** of private surface—federal minerals in Johnson County as competitive sale sites for salable minerals (e.g., sand, gravel, clinker).

**2. Designate areas of public lands** in Johnson County as community pit sites for small sales (less than $500) of salable minerals.

### Range

**1. Prepare an environmental statement on livestock grazing by 1986.** This will be done in response to a National Resources Defense Council/Bureau of Land Management agreement which calls for environmental statements on all BLM grazing areas.

**2. Develop 40 Allotment Management Plans following the completion of the environmental statement on livestock grazing.** Intensive management of these allotments accounts for 70 percent of the public lands leased for grazing. The remaining 30 percent are leased by 250 lessees and the public lands are not a significant portion of individual livestock operations.

**3. Develop range improvement projects to achieve proper utilization and improve range condition on public lands.** Any expenditure of range improvement funds must benefit the range resource on public lands.

**4. Determine season of use, class of livestock, number of livestock and percent federal range** on areas designated for intensive management.

### Forestry

**1. Allow clear cuts up to 20 acres** in size in stands of Douglas-fir, Engelmann spruce and lodgepole pine. Use partial cutting in all stands.

**2. No timber will be harvested in Sheridan County.**

**3. Develop an agreement with the State of Wyoming concerning:** 1) exchange of use of roads; 2) coordinated timber sales; and 3) collection of tree seed.

**4. Develop regeneration** on all old sale areas by 1983 and on all new sale areas within 5 years after harvest is completed.

**5. Grazing of livestock will be suspended or limited on regeneration areas** to prevent browsing of terminal leaders. Studies will be conducted on all new timber sale areas to determine the effect of browsing through construction of enclosures and/or wire screens.

**6. Harvest only dead, diseased or beetle infested trees from nonproductive forest land.**

**7. Encourage the utilization of slash as firewood.**

### Soil, Water and Air

**1. To ensure enough vegetative cover,** restrict amount of available forage removed by livestock to 60 percent under rest rotation grazing and 50 percent under other types of grazing systems.

**2. Chemically treat sagebrush** on Lower Four Mile Creek, and Crazy Woman Creek in Johnson County, and Middle Prong Creek and Cottonwood Creek in Sheridan County. Chemical treatment will only be carried out after these areas have been brought under intensive grazing management systems and only after studies have deemed it necessary.

**3. Rehabilitate areas damaged by ORV use and restrict ORV use,** where necessary, to protect areas from further damage by 1983.

**4. Do not allow roads or the placement of other "improvements" on slopes over 25 percent.**

**5. Protect all live water from contamination** by disallowing any oil and gas exploration or extraction activities within 500 feet of any stream, reservoir, or well unless otherwise specified by the area manager or district manager.

### Recreation

**1. Develop hunter exchange of use agreements** with private landowners where public and private lands are intermingled.

**2. Where the Bozeman Trail can still be seen,** do not allow surface occupancy within one-fourth mile on either side of the trail. In addition, all structures within one-half mile of the trail will be painted to blend with the natural surroundings.

**3. Do not acquire public access into key recreation use areas** until a management plan has been developed and funding is available to implement the plan.

**4. Coordinate a program through local rock and gem societies** to identify high potential collecting areas on public lands.

### Wildlife

**1. A habitat management plan** will be completed in cooperation with Wyoming Game and Fish Department to develop water facilities for big and upland game.

**2. Modify fences on antelope range** on public lands to allow antelope movement.

**3. Restrict ORV use, fencing, mineral development, and exploration** within crucial big game winter habitat from November 1 through May 1 each year.

**4. Fence all reservoirs larger than five surface acres** allowing five acres of upland habitat for each surface acre of water. Livestock water should be piped to tanks below dams.

**5. Allow no surface disturbance or occupancy** within one-half mile of active raptor (birds of prey) nest sites from March 1 to June 30 each year.

# CUMULATIVE ENVIRONMENTAL OVERVIEW

## Lands

The community oriented lands decisions are all designed to aid cities in accommodating orderly growth needs. The Fort MacKenzie decision will convert part of a military area to public recreation use. The Buffalo green belt decision will help prevent development near the city and encourage park recreation use. The Kaycee water site will aid the city in providing water for its citizens. The corridor decision will discourage the proliferation of transportation and utility rights-of-way throughout the area.

## Minerals

The oil field surface protection plan decision will enable BLM to plan for better surface rehabilitation on public lands where oil and gas has been developed and will minimize adverse impacts of this development. The mineral material and moss rock decision will assure orderly use of the mineral construction materials in the area. The decision about special management areas will provide a high level of management in critical areas and protect historical values.

## Range

Range decisions will maximize use of forage on public lands and minimize environmental damage. Some fences may obstruct wildlife movement. Location of water developments will favor wildlife needs. Range decisions will also help BLM obtain better data to evaluate the management needs for special areas.

## Forestry

The forestry decision will provide a base for better timber management, help BLM to clean up its decadent stands of timber, provide for better wildlife habitat, increase aesthetic values in the area and also provide a portion of the area's timber needs. Short term impacts during logging will be small and long term impacts should be largely beneficial.

## Soil, Water and Air

The beneficial impacts expected to result from these decisions are decreases in soil erosion and maintenance of quality water.

## Recreation

The recreation decisions are aimed at preventing the degradation of special values in the Middle Fork and Red Wall areas and preventing degradation of historic sites. The establishment of an environmental education area is a beneficial action for the community of Buffalo.

## Wildlife

Wildlife decisions will provide protection and improvement of significant wildlife habitat such as big game winter ranges as well as nesting and strutting areas. Proposed decisions specifically consider vegetative cover, potential surface or noise disturbance, critical water sources and management of livestock as it affects wildlife habitat. Some adverse impacts on mineral development will be caused by seasonal and permanent restrictions.

## INTERRELATIONSHIPS WITH OTHER PLANS

A special effort was made to coordinate this plan with other federal, state and local government agencies.

Governmental entities consulted include the U.S. Forest Service, Soil Conservation Service, U.S. Geological Survey, Wyoming Game and Fish Department, Sheridan and Johnson County Commissioners and Sheridan and Johnson County Planners. Additional government entities are being contacted via this planning brochure.

Some of the decisions have significant on and off site implications affecting other agencies. Decisions to make public lands available for public purposes should beneft local governments concerned with recreation needs and several communities in the planning area.

Livestock grazing will affect agencies such as the Soil Conservation Service, Wyoming State Land Board and the Forest Service, who work with the same range users as BLM. Range management practices affect wildlife populations either beneficially or adversely, and this is of direct interest to the Wyoming Game and Fish Department. Existing procedures call for cooperative planning on range management by all agencies involved. Timber harvest decisions will be coordinated with timber harvest plans on state and private lands. Wildlife management decisions have been coordinated closely with the Wyoming Game and Fish Department to ensure that habitat management is coordinated with objectives for each wildlife species. Using mineral materials for state, city and county use will benefit local government and allow them to develop long range road construction plans. Local timber harvests will be conducted in a manner to support local sawmills as well as enhancing watershed, recreation, grazing and wildlife values. These are just some of the examples of the coordination which has taken place on some of the major issues.

## ACTIONS AFTER THE LAND USE PLAN

This brochure discusses the final land use plan decisions for Sheridan and Johnson counties. This plan will be followed by on-the-ground actions. These actions are subject to the requirements of the National Environmental Quality Act. An environmental assessment is prepared for each action whether it is initiated by others or by BLM. If the impacts are unacceptable, the proposed action may be modified or rejected. Implementation of on-the-ground actions initiated by BLM is contingent upon the necessary funding by Congress. It may be some time before some of these decisions are implemented. Any major changes in this plan will be subject to public review and comment.

# GLOSSARY

**Allotment Management Plan (AMP):** A written plan for the management of livestock grazing designed to attain prescribed goals for each grazing allotment (a parcel of public lands assigned to a grazing lessee). Each AMP is prepared in cooperation with the livestock operator. AMP's establish grazing use patterns or systems to stimulate the growth of the desired vegetation.

**Animal Unit Month (AUM):** A measure of forage or feed required to maintain one cow or five sheep one month. The AUM is primarily used in measuring the amount of forage on public lands.

**Bentonite:** A clay formed from volcanic ash that has great ability to absorb or adsorb water and to swell accordingly. Used in drilling mud, taconite production and in the foundry industry. Most of the bentonite consumed by the rest of the world is produced in Wyoming.

**Coal Lease:** A legal contract between the federal government and the coal developer granting the developer the right to mine federal coal upon payment of an agreed rental, bonus and for royalty.

**Custodial Livestock Management:** Minimum regulations of grazing on public lands. Special stipulations will be added to grazing leases only when needed to prevent damage to public lands.

**Environmental Impact Statement (EIS):** A document prepared in response to the National Environmental Policy Act of 1969. The EIS assesses the impacts of a proposed action on the quality of the human environment. It also identifies mitigating measures that can be employed to reduce adverse impacts. The EIS is a tool that decision-makers use to weigh the environmental consequences of a proposed action.

**Federal Land Policy and Management Act of 1976 (FLPMA):** A comprehensive federal law combining and consolidating many archaic and often conflicting federal land management laws. It is the first clear cut mandate Congress has ever given to the Bureau of Land Management for managing the 473 million acres of public lands under its jurisdiction. Also called the BLM Organic Act.

**Forage:** Plants available to and chosen for consumption by grazing animals.

**Groundwater Recharge:** Movement of water from the earth's surface to underground bodies of water (aquifers).

**Habitat Management Plan (HMP):** A BLM activity plan designed for a specific area to achieve maximum wildlife production.

**Land Exchange:** Trading of public lands (with or without subsurface rights) for lands in other ownerships which have value for public use, management and enjoyment. An exchange may be for the benefit of other federal agencies as well as BLM.

**Management Framework Plan (MFP):** A planning decision document which establishes, for a given planning area, land use allocations, coordination guidelines for multiple use and management objectives to be achieved for each class of land use or protection. It is the Bureau's Land Use Plan. It is prepared in three steps: Step One—Resource Recommendations; Step Two—Impact Analysis and Alternative Development; and Step Three—Decisionmaking.

**Mitigation:** A modification to lessen the negative results or increase the beneficial aspects of a proposed action. Mitigation is a critical element in environmental statements.

**Multiple Use Management:** A philosophy designed to enable public lands to be managed for as many uses simultaneously as practical. This philosophy recognizes diverse needs of the public and tries to relate these needs to the various resource values on the land.

**National Environmental Policy Act of 1969 (NEPA):** This act requires that federal agencies consider and document the environmental impact of proposed legislation or actions that would have a significant effect on the quality of the human environment. Regulations promulgated by the Council on Environmental Quality require environmental statements to comply with this law.

**Noxious Weeds:** A weed defined by state law as being especially undesirable, troublesome or difficult to control.

**Off-Road Vehicle (ORV):** Any vehicle capable of, or designed for travel on or immediately over land, water, or other natural terrain, deriving motive power from any sources other than muscle, excluding: (1) any non-amphibious registered motorboat; (2) any military, fire, emergency, law enforcement or other government vehicle while being used for official or emergency purposes; and (3) any vehicle whose use is expressly authorized on public land.

**Perennial Stream:** A stream that flows all the time.

**Planning Area:** One or more complete planning units for which a land use plan is to be prepared.

**Planning Unit:** A portion of a Bureau of Land Management district used for assembling resource inventory data. For each planning unit the district manager prepares a Unit Resource Analysis.

**Public Sale (Bureau Motion):** Sale of public land initiated by BLM. The specific tract must be identified in management plans as having no public values or that it cannot be managed due to isolation within other non-federal holdings. Public sale is by auction to the highest bidder at or above the appraised value.

**Recreation and Public Purposes Act (R&PP):** An act passed by Congress on June 14, 1926, which allows for the disposal of public lands to certain governmental agencies or other qualified organizations for recreational or public purpose needs.

**Reclamation of Mined Land:** The process of returning mined lands to a stable condition and form consistent with their premining productivity and use or other approved post-mining land use. Also called rehabilitation.

**Riparian Habitat:** Natural wildlife abode situated on or pertaining to the bank of a river, stream or other body of water.

**Sage Grouse Strutting Grounds:** A specific area where sage grouse congregate to perform courtship displays during breeding season.

**Sanitary Landfills:** Land uses for disposing of solid municipal or industrial waste such as garbage, paper, sludge, cans, glass or other disposable items. Disposal is accomplished through placement in trenches and covered with soil. Landfills may be located on land where additional filling is needed prior to converting the land to other uses.

**Sedimentation:** The deposition of eroded soil particles in and around areas containing slow moving or soil water.

**Stocking Rate:** In range management, the area of land allotted to each animal unit for the grazable period of the year expressed in acres per animal unit month.

**Stock Driveway:** A reservation of public lands for public use in moving livestock.

**Transmission and Transportation Corridors:** A strip of land where highways, railroads and power lines and pipelines can be consolidated to restrict impacts to certain predetermined areas.

**Unit Resource Analysis (URA):** A basic source of information on the land and its resources, consisting of:

Base Map
Physical Profile
Resource Inventory
Summaries

Resource potential and capability of the land to fill the public's needs for these activities: lands, minerals, recreation, wildlife, watershed, forest products and range management.

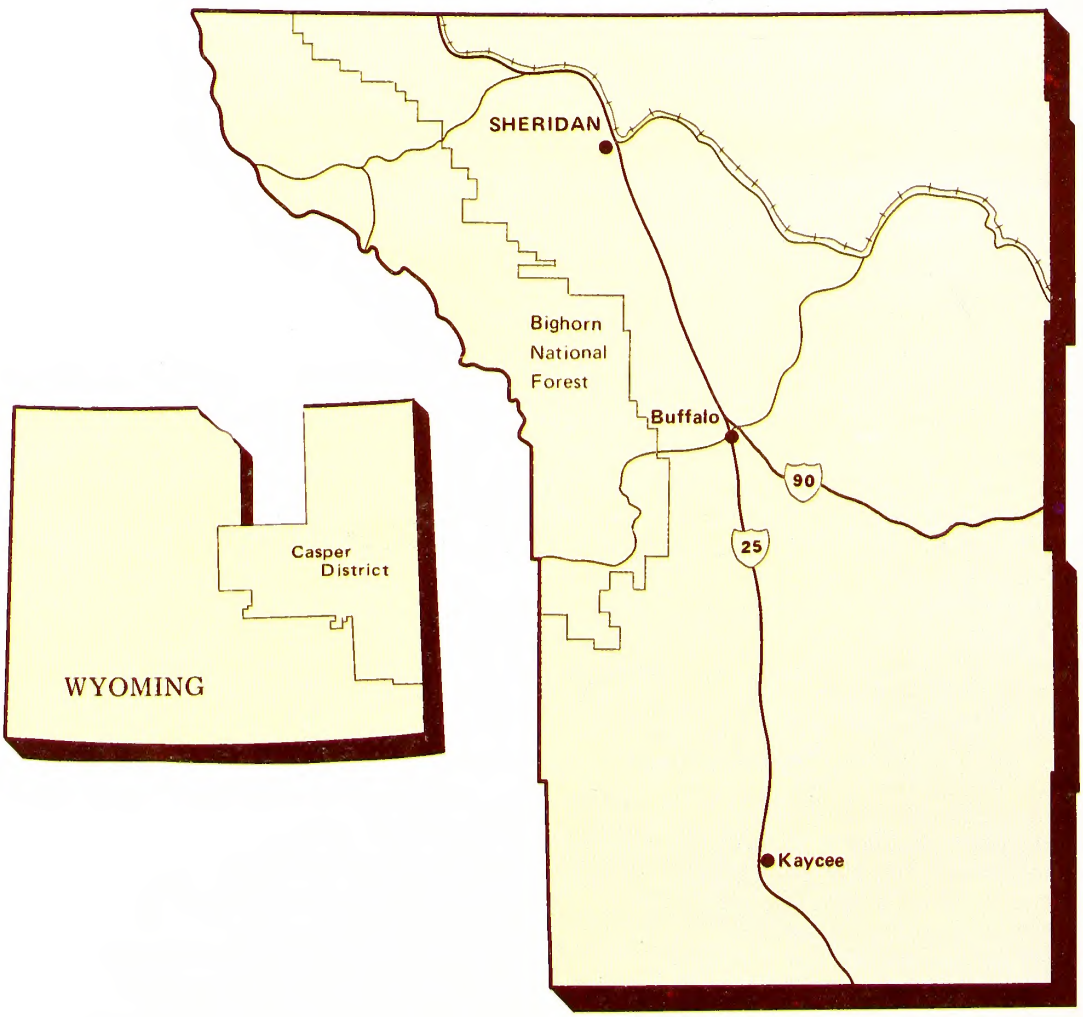
**Upland Game Birds:** Game birds whose habitat is not associated with bodies of water. Examples are: sage grouse, pheasants and partridges.

**Water Control Devices:** Man-made structures used to detain or retain surface water, thereby preventing or reducing runoff damages due to erosion, including devices such as diversion ditches, detention dams, waterbars, and water spreaders.

**Watershed:** The land surface contained within a natural surface water drainage system. Watersheds are delineated by a drainage device.

**Watershed Tillage:** Mechanical treatment of the surface for the purposes of decreasing surface runoff, increasing soil infiltration or decreasing erosion.

# General Location Map



## Comment Sheet

**District Manager**
**Bureau of Land Management**
**Casper, Wyoming 82601**

Following are my comments regarding the Western Powder River Land Use Management Plan:

(tear here)

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Address _____

City _____ State _____ Zip _____

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**Casper, Wyoming 82601**

## Wyoming State Office

2515 Warren Avenue
P.O. Box 1828
Cheyenne, Wyoming 82001

## District Offices

**Worland District**
P.O. Box 119
Worland, Wyoming 82401

**Cody Resource Area**
Federal Building
P.O. Box 528
Cody, Wyoming 82414

**Casper District**
951 Union Boulevard
Casper, Wyoming 82601

**Newcastle Resource Area**
Highway 16 Bypass
Newcastle, Wyoming 82701

**Buffalo Resource Area**
P.O. Box 670
Buffalo, Wyoming 82834

**Rock Springs District**
P.O. Box 1869
Rock Springs, Wyoming 82901

**Pinedale Resource Area**
P.O. Box 768
Pinedale, Wyoming 82941

**Kemmerer Resource Area**
P.O. Box 632
Kemmerer, Wyoming 83101

**Rawlins District**
P.O. Box 670
Rawlins, Wyoming 82301

**Lander Resource Area**
P.O. Box 589
Lander, Wyoming 82520

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